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CIBCR

RECESSION - RECOVERY WATCH...

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SUMMARY

Prospects for a recovery proceeding at about the average pace of past recoveries are enhanced by the fact that leading indexes have already been doing this for about six months. In April the second of three sequential signals of recovery, a signal that has never proved false in the past 35 years, was passed. The gain in the leading employment index in recent months implies a substantial reduction in unemployment in the year ahead, down to an average level of about 9 percent for the twelve months ending next June. The beginnings of an upswing in capital investment can be observed in the advancing percentage of industries raising their capital appropriations. A new leading index of inflation has stopped declining, suggesting that the downward pressures on inflation have subsided.

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An Average Recovery in the Making

Economic forecasters have been raising their estimates of the strength of the recovery. An upward drift in forecasts as a recovery gets underway is not unusual. In fact, it is one of the average features of a recovery. Underestimates of the vigor of the upturn are the rule, just as at the beginning of a recession forecasters typically underestimate the rate of decline.

Recession-Recovery Watch helps to guard against this bias by making a continuing comparison of the current movements in economic indicators with their average performance in previous recessions or recoveries. By doing this with leading indicators -- those that give advance warning of emerging trends in employment and output -- one can see an average recovery developing before it has even started. Or, one can see whether it is below or above average.

Take, for example, the situation as it was back in December 1982, when the recovery had not yet begun. Even then, the Commerce Department's leading index was registering something like an average recovery, after one allowed for the fact that the recession had lasted about six months longer than average (see Charts 3 and 7). During the three months ending in December, the index rose at a 9 percent annual rate, compared with a 6 percent average rate at the troughs of the seven previous recessions. By April 1983 the three-month growth rate was 21 percent, slightly above the average rate of 20 percent at the corresponding point

CHANGES IN THE JUNE ISSUE OF RECESSION-RECOVERY WATCH

1. Three new series are included this month: the short duration unemployment rate, the growth rate of the industrial materials price index, and the leading index of inflation. The short duration unemployment rate is the number of people unemployed less than 15 weeks, divided by the labor force. The leading index of inflation is compiled by the Center, based upon the employment to population ratio, the growth rate of the industrial materials price index, and the growth rate of total debt.

2. The leading and coincident employment indexes have been revised. The leading index includes six components: the average workweek and overtime hours in manufacturing, initial claims for unemployment insurance, short-duration unemployment rate, ratio of voluntary to involuntary part-time employees (part-time employment ratio), and layoff rate. The coincident index includes five components: total employment and the unemployment rate from the household survey, nonfarm employment and employee hours from the payroll survey, and the insured unemployment rate from the unemployment insurance program.

3. The following series have been revised because the resident armed forces are counted as employed -- a procedure recently adopted by the Bureau of Labor Statistics: total employment, the employment to population ratio, the unemployment rate, the layoff rate, and the short duration unemployment rate.

4. The growth rates shown in Table 1 and the charts are expressed as actual levels rather than as deviations from their level at the business cycle peak. This permits direct comparison of the current growth rate with the rate attained in previous recoveries.

in the seven previous recoveries (Table A).

If high interest rates, which have been commonly cited as the main reason for expecting the recovery to be subnormal, were really going to have that effect, why weren't they producing a subnormal recovery in the leading indicators? Housing starts, which is one of the leading indicators, have been staging a better-than-average recovery, sparked by a bigger-than-average decline in interest rates (Chart 30). The same is true of stock prices, another leading indicator (Chart 52).

The CIBCR leading index that pertains directly to the labor market, and includes such leading indicators as the average workweek and the number of new claims for unemployment insurance benefits, was a bit slower to show a recovery. But once these employment leaders did start up last autumn, they soon exhibited average recovery performance or better (Charts 1 and 5). Again, if the recovery in employment or decline in unemployment was to be slower than average, why weren't the leading employment indicators showing it?

The answer seems to be that other factors were having a more powerful effect. One of these is tied up with the fact that deeper than average recessions are usually followed by sharper than average recoveries. The 1981-82 recession was clearly deeper than average. Severe recessions cause the postponement of many new enterprises, investment projects and financial deals. This builds up a backlog that breaks loose once conditions look brighter. Inventories are reduced more than usual, and then must be replenished. Recoveries after deep recessions are the beneficiaries of a catching-up process (see the February 1983 issue of Recession-Recovery Watch).

Another factor is that the 1981-82 recession, which followed hard on the heels of the 1980-81 recession, had an unusually large effect on costs of production. Labor costs, cost of materials, and financing costs all came down sharply. Price inflation came down sharply, too, partly as a result of the cost reduction. But the cost reductions improved the profit outlook, and this in turn stimulated the recovery and is still doing so.

TABLE A

GROWTH RATES IN THE LEADING INDEX

Business Cycle Trough	At the Trough	Four Months After Trough
	(percent, at annual rate)	
October 1949	29	16
May 1954	9	13
April 1958	0	28
February 1961	3	18
November 1970	1	18
March 1975	-5	29
July 1980	5	16
Average, 7 cycles	6	20
December 1982	9	21

Note: The growth rates pertain to the preceding three months. The leading index is published by the U.S. Department of Commerce. The business cycle trough dates are from the National Bureau of Economic Research, except for December 1982, which is tentative.

Second Signal of Recovery Passed

According to the April figures for the leading and coincident indexes (BCD), the economy has passed the second of the three sequential signals of recovery. The first signal, defined by a six-month smoothed growth rate in the leading index of 1.0 percent or higher, had been reached in July 1982. The second signal requires a growth rate of at least 4.3 percent in the leading index and 1.0 percent in the coincident index. The leading index has long since surpassed the required 4.3 percent but the coincident index did not do so until April. As of April the leading and coincident rates were 16.7 percent and 1.2 percent, respectively (Charts 7 and 8).

This result is confirmed by the May growth rates for the leading and coincident employment indexes, which were 10.8 percent and 2.8 percent, respectively. What this means is that both the sensitive leading indicators and the broad measures of the economy's performance have moved well above their average levels during the preceding twelve months. The second signal of recovery has never proved false during the past thirty-five years of business cycle history. If the date of the business cycle trough is December 1982, which seems likely although it has not yet been confirmed by the National Bureau of Economic Research, Inc., the lag of four months in the second signal is well within the range of previous experience. The average lag at the past seven upturns was five months.

Signs of Lower Unemployment

In May the unemployment rate was 10.0 percent, below the peak of 10.7 percent in December 1982 but trending down only slightly since January (Chart 21). Meanwhile, the leading employment index has been rising vigorously since its low point last September (Chart 1). What does the leading index portend for unemployment?

To answer this we can use the method described by Moore in the May 1983 issue of the Monthly Labor Review (pp. 30-32). The growth rate in the leading employment index (prior to the target trend adjustment) was found to be related to the change in unemployment for the year ahead. In the article, the leading indexes for October, November and December were used to forecast changes in the average unemployment rate between the year just ending and the calendar year ahead. During the period 1969-82 the forecasts tracked the changes in unemployment rather closely through recession and recovery, with an average error of about a half-percentage point.

By analogy, we can use the same method to forecast the average unemployment rate for the twelve months from July 1983 through June 1984, using the growth rate in the leading employment index as of May 1983. The result is a projected unemployment rate averaging 8.9 percent for the year ending June 1984. In view of the half-percent average error in previous years' forecasts, it is reasonable to expect an average rate within the range of 8½ to 9½ percent. This would, of course, be a decided improvement on the present level.

Upturn in Capital Investment Ahead

Expenditures for new plant and equipment are in the doldrums, and even the anticipated spending this year shows virtually no pick-up. But there are significant, usually trustworthy, and little-noticed signs of a turnaround. First, one must distinguish between the late stages of investment, represented by actual outlays, and the early stages, represented by new orders for machinery and equipment, contracts for commercial and industrial construction, and new capital appropriations. Second, since not all enterprises or industries hop on the band-wagon at once, one should look at measures that show whether more and more of them are beginning to do so. Such measures, known to technicians as diffusion indexes, simply show what

percentage of industries or companies are increasing their orders, appropriations, etc.

Arthur Burns pointed out more than thirty years ago that in economic aggregates such as total capital spending there was an "unseen" cycle as well as the usual "seen" one. The unseen cycle was in the diffusion, and it regularly preceded the seen cycle in the aggregate itself. What Burns said then has held true ever since, and has been faithfully recorded in the diffusion index section of Business Conditions Digest. One of these indexes, pertaining to the percentage of industries reporting a gain in employment, is in Chart 23. It reached its lowest ebb last November, when only 19% out of 186 nonfarm industries reported that they had more employees than six months ago. This anticipated the low point in aggregate employment by only one month, but it was a lead nonetheless. The latest figure, for May, shows a widespread recovery, with 64% expanding their payrolls from six months ago.

A similar trend can be observed in two diffusion indexes reflecting the early stages of capital investment. New orders received by 34 industries manufacturing machinery and other durable goods, as of April 1982, were up from nine months earlier in only 15% of the industries. This was the lowest percentage for the recession. The latest figure, for April 1983, was 68%. New orders received for durable goods are not precisely equivalent to orders placed for capital equipment, however, so this measure is only a rough indicator of the latter. Another measure, new capital appropriations, is more direct. Increases in such appropriations were reported by only 27% of 17 manufacturing industries in the second quarter of 1982, the low for the recession. By the first quarter of 1983, the percentage was up to 53%. It appears that an advance in commitments for capital spending has spread to more than half of the industrial sector. The first stage of a capital investment upswing has begun.

A New Pressure Gauge for Inflation

Chart 44 shows the average pattern of change in a new leading index of inflation during recession and recovery. It brings together in one index three basic indicators of inflationary pressure, pertaining to the labor markets, commodity markets, and financial markets. Each component is shown separately in Charts 18, 43 and 46. These components were selected because

each has a well-established record of turning up or down ahead of inflation and because there are cogent economic reasons for their doing so. The index, therefore, has moved up or down before the swings in the rate of inflation (Chart 45) throughout the period since 1948. Its lead/lag record (Table B), shows an average lead of seven months at upturns in the rate of change of consumer prices, although in recent years the lead has been nearer twelve months.

To date the low in the index was in December 1982 and by March, April and May it had returned to the level it had reached a year ago. The index is saying that the downward pressure on the inflation rate has stopped. The upward pressure has, however, not gone very far. The percentage employed, at 57.6 percent in May, is only a shade above its low of 57.5 percent in March. The growth rate in business, consumer and Federal debt, at 5.1 percent in April, is modest. The worrisome upsurge in industrial materials prices lasted through March, but has not been renewed since then.

For these and other reasons, notably the upswing in productivity growth and declining gains in unit labor costs (Charts 34 and 35), a continuing low level of inflation is a likely prospect at least for the next six months or so.

TABLE B

Dates of Cyclical Turning Points in the Leading Inflation Index and in the Inflation Rate

Peaks			Troughs		
Leading index	Inflation rate[a]	No. months lead	Leading index	Inflation rate[a]	No. months lead
			6/49	7/49	1
11/50	2/51	3			
			8/52	3/53	7
3/53	10/53	7			
			7/54	10/54	3
12/55	8/57	20			
			4/58	3/59	11
7/59	10/59	3			
			2/61	6/61	4
1/66	10/66	9			
			4/67	5/67	1
4/69	2/70	10			
			11/70	6/72	19
3/73	9/74	18			
			6/75	6/76	12
3/79	3/80	12			
Average		10			7

a. As measured by the consumer price index.

RECESSION-RECOVERY PATTERN CHARTS

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RECESSION - RECOVERY PATTERNS

———— Current recession (business cycle peak: July 1981 or IIIQ 1981)

////////// Average of six recessions (1948-49, 1953-54, 1957-58, 1960-61, 1969-70) 1973-75)

How to Read the Charts

The horizontal time scale in each chart shows the number of months before (-) or after (+) the business cycle peak (0). For the current cycle July 1981 is zero, January 1982 is Month 6, etc. The vertical scale on the left side for most series is an index with the three-month average centered on the business cycle peak date equal to 100. This three-month average is called the peak standing. For the current cycle, the figures plotted are indexes with the June to August 1981 average equal to 100. Each of the previous cycles is converted to an index in the same way, and then the corresponding months are averaged for the six cycles, 1948-75. Quarterly series (e.g., GNP) are treated in the same way as monthly except that quarterly business cycle peak dates are used and each quarter is plotted as a horizontal line for three months.

When the figures are percentages, as in the unemployment rate, the inflation rate or other growth rates, the figures shown represent the actual levels of the data, rather than deviations from peak standings.

On all charts the right-hand scale applies to the current cycle, so that one can see where new figures or forecasts would be placed. Also, this scale shows how the averages for previous recessions would translate to current levels. The July 1981 peak standing for the current cycle is shown at the bottom of the chart for reference purposes.

The averages include only six cycles rather than seven, because the 1980-81 cycle lasted only 18 months from peak (January 1980) to peak (July 1981). Averages extending beyond 18 months would begin to overlap with the current cycle.

All the growth rates shown are six-month smoothed rates (or two-quarter smoothed), obtained by dividing the current month's index by the average for the twelve preceding months, and expressing the result as a compound annual rate.

Data in some of the charts are a month or a quarter more up-to-date than in Table 1.

RECESSION/RECOVERY STATUS UP TO 22 MONTHS AFTER THE BUSINESS CYCLE PEAK

PERCENTAGE ABOVE (+) OR BELOW (-) THE PRECEDING BUSINESS CYCLE PEAK, UNLESS OTHERWISE NOTED

		MONTHS AFTER BUSINESS CYCLE PEAKS	THREE MILD RECESSIONS STARTING APR 1960	DEC 1969	JAN 1980	FOUR SHARP RECESSIONS STARTING NOV 1948	JULY 1953	AUG 1957	NOV 1973	AVG. 1948 -73	CURRENT RECESSION STARTING JULY 1981	LAST MONTH OR QUARTER AVAIL.
I.	COMPOSITE INDEXES											
1.	LEADING EMPLOYMENT INDEX (CIBCR)	22	8.9	-1.0	-2.0	10.1	4.9	9.2	-6.4	4.3	1.1	05/83
2.	COINCIDENT EMPLOYMENT INDEX (CIBCR)	22	1.8	-4.5	-3.6	3.8	-2.8	1.2	-9.8	-1.7	-7.7	05/83
3.	LEADING INDEX (BCD)	21	11.1	5.4	-2.7	21.2	14.2	14.4	-8.6	9.6	6.7	04/83
4.	COINCIDENT INDEX (BCD)	21	1.3	-1.3	-3.7	10.7	-0.4	2.5	-9.8	0.5	-8.0	04/83
5.	LEADING EMPLOY. INDEX, GROWTH RATE *	22	10.9	5.1	-6.1		13.2	11.3	4.8	9.1	10.8	05/83
6.	COINCIDENT EMPLOY. INDEX, GROWTH RATE *	22	10.9	2.6	-3.6		15.5	18.1	-1.6	9.1	2.7	05/83
7.	LEADING INDEX, GROWTH RATE *	21	9.0	8.0	-7.1		16.3	13.4	10.6	11.5	16.7	04/83
8.	COINCIDENT INDEX, GROWTH RATE *	21	7.3	2.7	-2.6		12.9	15.5	-1.7	7.3	1.2	04/83
9.	LAGGING INDEX (BCD)	21	-4.9	-5.1	-1.2	-1.9	-7.7	-6.3	-6.1	-5.3	-8.3	04/83
10.	COINCIDENT/LAGGING RATIO *	21	-2.4	3.0	15.6	46.0	22.2	6.8	9.7	14.2	20.5	04/83
II.	OUTPUT, INCOME AND SALES											
11.	REAL GNP	18	5.5	2.9	1.0	5.7	0.0	3.3	-3.7	2.3	-1.6	I/83
12.	REAL GNP GROWTH RATE *	18	7.4	3.5	2.3	9.6	3.9	7.3	-1.9	5.0	1.0	I/83
13.	INDUSTRIAL PRODUCTION INDEX	22	6.1	0.3	-4.1	15.9	4.5	7.6	-7.1	4.6	-6.0	05/83
14.	REAL PERSONAL INCOME	21	5.5	4.8	3.3	7.5	4.3	4.6	-0.2	4.4	1.0	04/83
15.	REAL CONSUMER EXPENDITURES	20	4.2	4.9	1.1	7.6	5.7	5.4	2.2	5.0	2.7	03/83
16.	REAL RETAIL SALES	22	2.1	10.3	-3.3	14.3	10.6	4.8	-1.0	6.8	3.6	05/83
III.	EMPLOYMENT AND UNEMPLOYMENT											
17.	TOTAL EMPLOYMENT	22	1.9	1.1	0.4	1.7	0.2	0.6	0.0	0.9	1.0	05/83
18.	EMPLOYMENT/POPULATION RATIO *	22	56.5	57.2	59.0	57.0	57.1	56.9	56.6	56.9	57.6	05/83
19.	NONFARM EMPLOYMENT	22	1.0	0.6	0.3	2.7	0.1	1.3	-0.7	0.9	-2.1	05/83
20.	NONFARM EMPLOYEE-HOURS	22	1.2	-1.6	-1.5	2.9	0.5	1.8	-2.3	0.4	-2.0	05/83
21.	UNEMPLOYMENT RATE, TOTAL *	22	5.3	5.7	8.1	4.4	4.1	4.9	8.3	5.4	10.0	05/83
22.	UNEMPLOYMENT RATE, INSURED *	22	4.5	4.0	3.8	3.5	3.4	3.5	5.7	4.1	4.3	05/83
23.	EMPLOYMENT DIFFUSION INDEX, 186 IND. *	22	73.1	55.2	34.4	100.0	83.3	89.3	57.0	76.3	64.0	05/83
24.	PART-TIME EMPLOYMENT RATIO *	22	2.5	3.9	2.5			2.2	3.2	2.9	2.0	05/83
25.	AVERAGE WORKWEEK, MFG.	22	1.1	-1.3	-2.1	2.9	0.8	1.8	-1.8	0.6	0.0	05/83
26.	OVERTIME HOURS, MFG.	22	6.6	-16.3	-17.6			29.9	-26.3	-1.6	-10.0	05/83
27.	LAYOFF RATE *	22	0.3	0.9	1.7	0.3	0.7	0.6	2.0	0.8	1.9	05/83
28.	INITIAL CLAIMS, UNEMP. INSURANCE	22	-3.1	33.4	30.3	-15.7	5.5	-4.1	72.1	14.7	13.5	05/83
29.	SHORT DURATION UNEMPLOYMENT RATE	22	3.6	4.3	6.0	3.4	3.0	3.5	5.5	3.9	5.8	05/83

IV.	INVESTMENT COMMITMENTS AND INVENTORIES										
30.	HOUSING STARTS	22	4.5	75.3	-39.9	51.6	28.1	26.1	-33.0	27.1	77.3	05/83
31.	CONTRACTS & ORDERS, PLANT & EQUIP.	21	5.5	-3.3	-10.4	91.5	23.5	13.0	-20.1	18.3	-3.6	04/83
32.	INVENTORY/SALES RATIO, TIMES 10 *	20	14.9	16.6	16.9	12.6	14.6	14.6	17.1	15.1	16.6	03/83
33.	CH IN INVENT ON HAND & ON ORDER, BIL 72$ *	20	11.1	-6.8	8.9	13.7	5.2	21.4	-20.0	4.1	-9.3	03/83
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
34.	OUTPUT PER HOUR, GROWTH RATE *	18	5.6	2.6	0.8	7.2	3.5	4.8	3.5	4.5	2.9	I/83
35.	UNIT LABOR COSTS, GROWTH RATE *	18	-2.1	4.0	8.2	-1.2	-1.1	-1.0	5.4	0.7	3.2	I/83
36.	HOURLY COMPENSATION, GROWTH RATE *	18	3.5	6.8	9.1	6.2	2.4	3.9	9.5	5.4	5.8	I/83
37.	REAL HOURLY COMPENSATION, GROWTH RATE *	18	2.8	2.6	-1.2	5.5	3.4	3.5	1.3	3.2	3.2	I/83
38.	SELLING PRICE INDEX, GROWTH RATE *	18	0.6	4.8	9.4	0.4	2.2	2.6	9.3	3.3	4.7	I/83
39.	PRICE/LABOR COST RATIO *	18	100.0	99.1	98.1	102.6	100.7	101.0	98.9	100.4	97.5	I/83
40.	BUSINESS FAILURES	21	22.6	7.5	124.7	-53.1	-4.5	27.3	14.3	2.3	79.9	04/83
41.	CORPORATE PROFIT MARGIN *	18	9.9	7.1	6.1	11.5	10.1	10.2	6.1	92.0	6.8	I/83
42.	INDUSTRIAL MATERIALS PRICE INDEX	22	-1.9	-7.0	-19.4	19.3	5.9	0.9	-4.3	2.2	10.8	05/83
43.	INDUSTRIAL MAT PRICE INDEX, GROWTH RATE *	22	-0.8	-0.6	-21.8	96.5	4.7	8.3	3.1	18.5	18.9	05/83
44.	LEADING INDEX OF INFLATION	22	-0.3	-0.3	-9.7	18.5	0.6	5.7	-13.3	1.8	-6.0	05/83
45.	CONSUMER PRICE INDEX, GROWTH RATE *	21	0.7	3.7	9.8	3.9	-0.3	0.6	7.2	2.6	2.3	04/83
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
46.	TOTAL DEBT, GROWTH RATE *	21	6.7	10.7	8.5			9.1	6.9	8.3	5.1	04/83
47.	BUSINESS & CONSUMER DEBT, GROWTH RATE *	21	9.4	11.1	7.9			13.1	2.8	9.1	-0.3	04/83
48.	FEDERAL DEBT, GROWTH RATE *	21	3.4	9.8	10.4	0.8	1.7	5.1	20.7	6.9	20.2	04/83
49.	MONEY SUPPLY (M1), GROWTH RATE *	21	3.0	7.0	3.8	4.7	3.5	4.7	6.1	4.8	11.2	04/83
50.	TREASURY BILL RATE *	22	2.7	4.5	10.9	1.3	1.4	3.2	6.4	3.3	8.2	05/83
51.	CORPORATE BOND YIELD *	22	4.5	7.7	15.5	2.8	3.3	5.0	9.9	5.5	11.2	05/83
52.	STOCK PRICE INDEX (S&P 500)	22	26.9	5.1	10.4	22.6	55.3	24.6	-17.2	19.6	25.6	05/83

* ACTUAL LEVEL

CHART 1

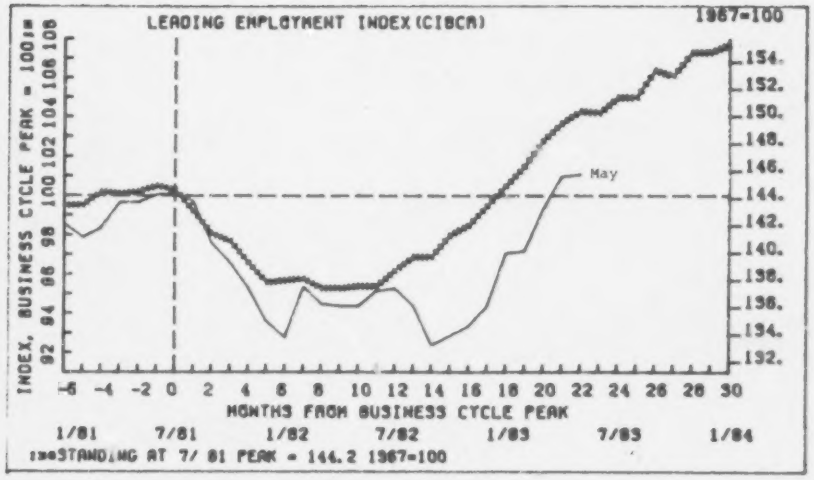
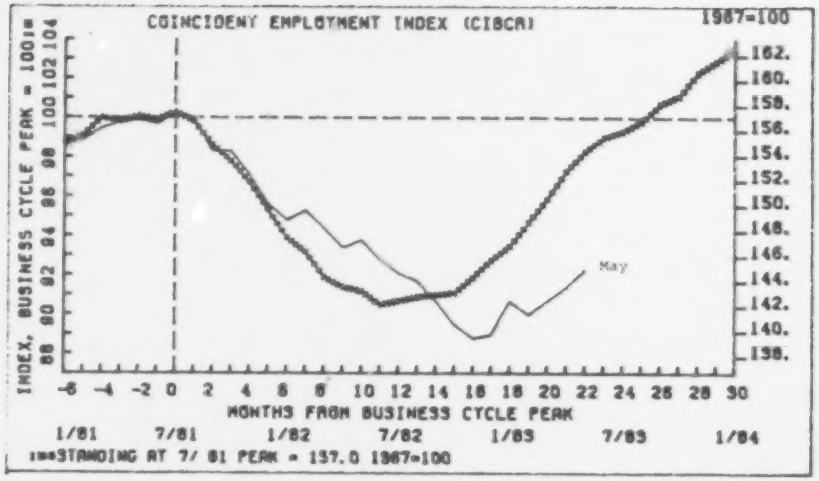


CHART 2



11

CHART 3

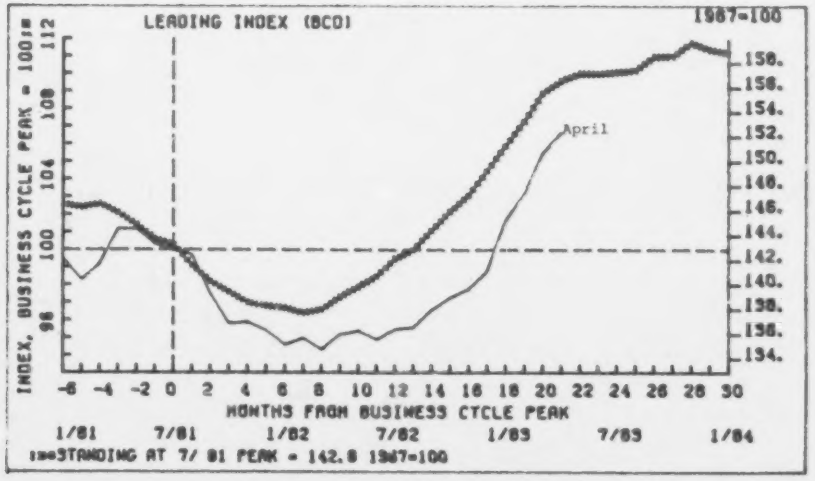


CHART 4

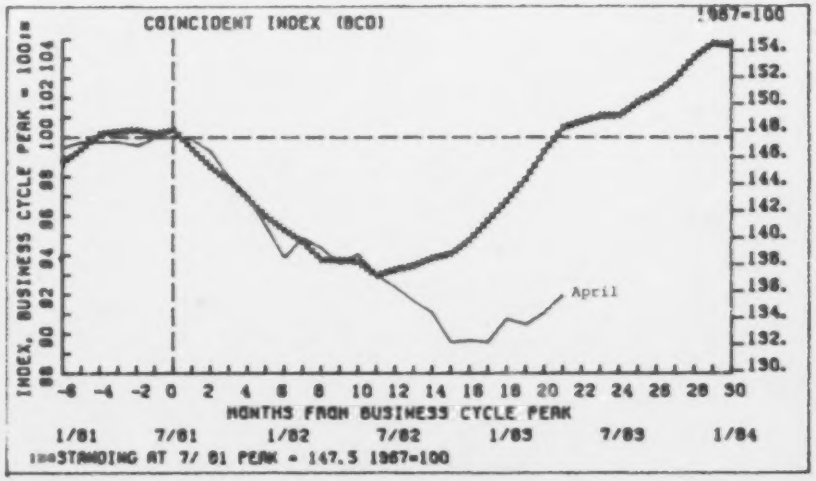


CHART 5

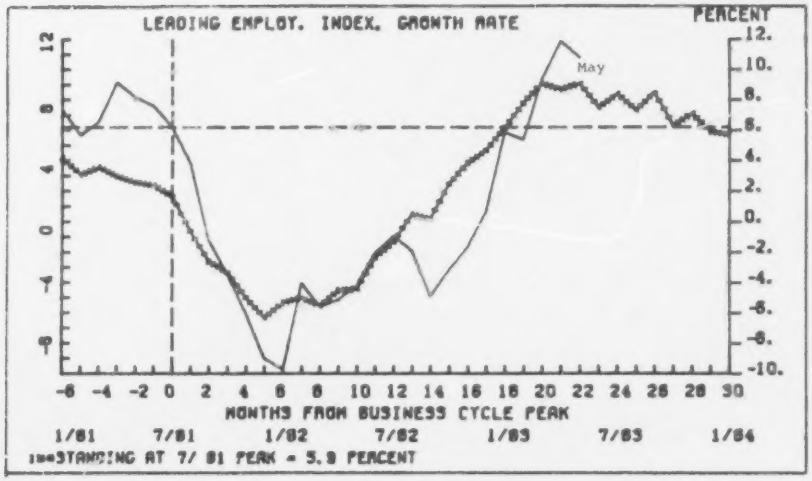

LEADING EMPLOY. INDEX. GROWTH RATE
PERCENT
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 5.9 PERCENT

CHART 6

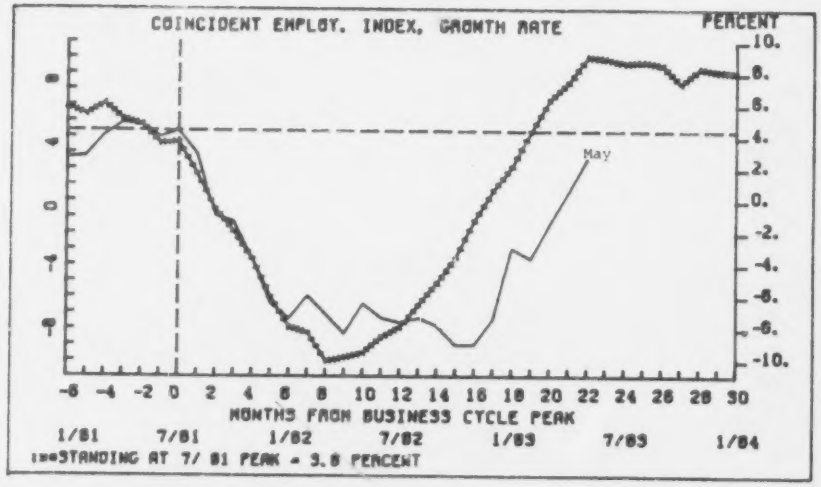

COINCIDENT EMPLOY. INDEX, GROWTH RATE
PERCENT
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 3.8 PERCENT

CHART 7

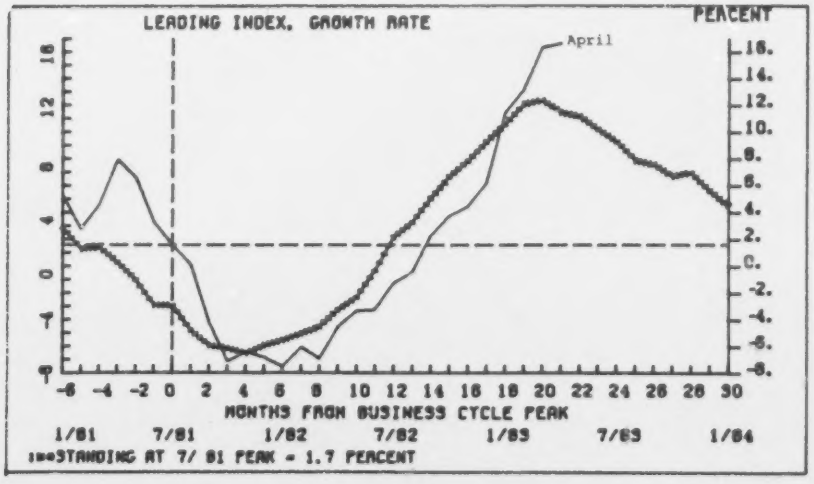

LEADING INDEX, GROWTH RATE
PERCENT
April
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 1.7 PERCENT

CHART 8

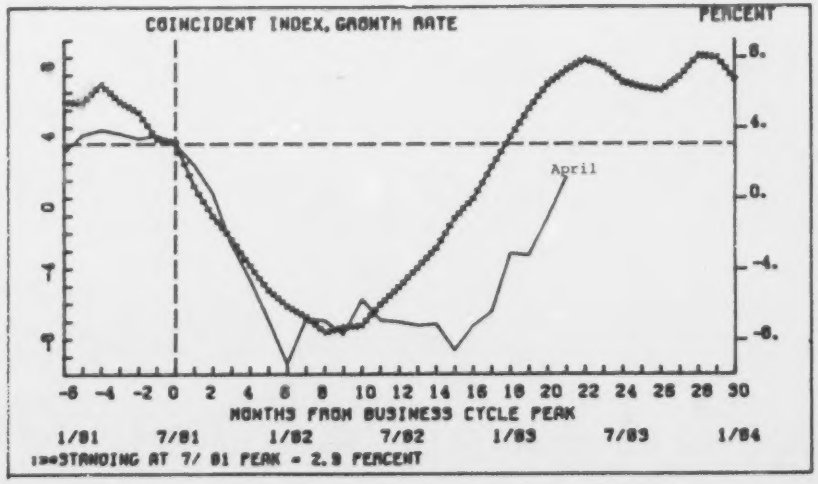

COINCIDENT INDEX, GROWTH RATE
PERCENT
April
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 2.9 PERCENT

CHART 9

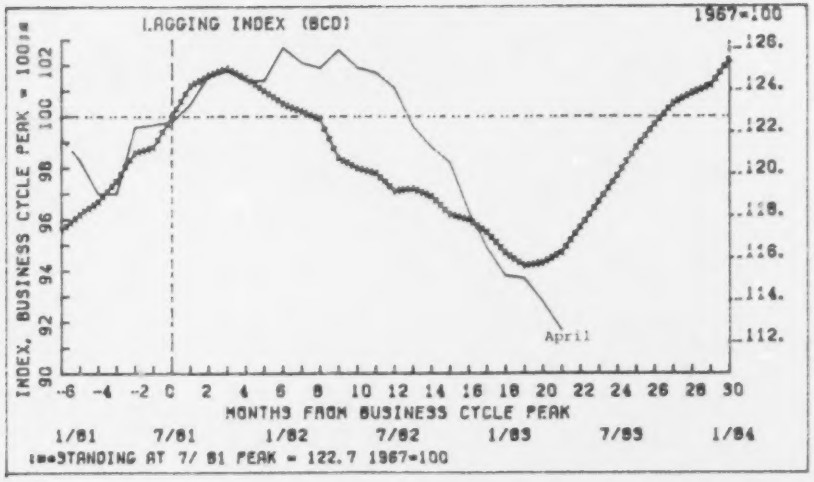


CHART 10

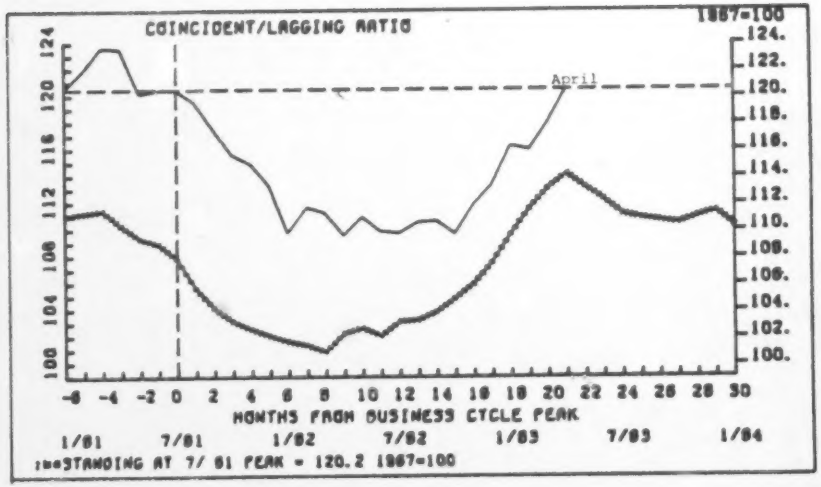


CHART 11

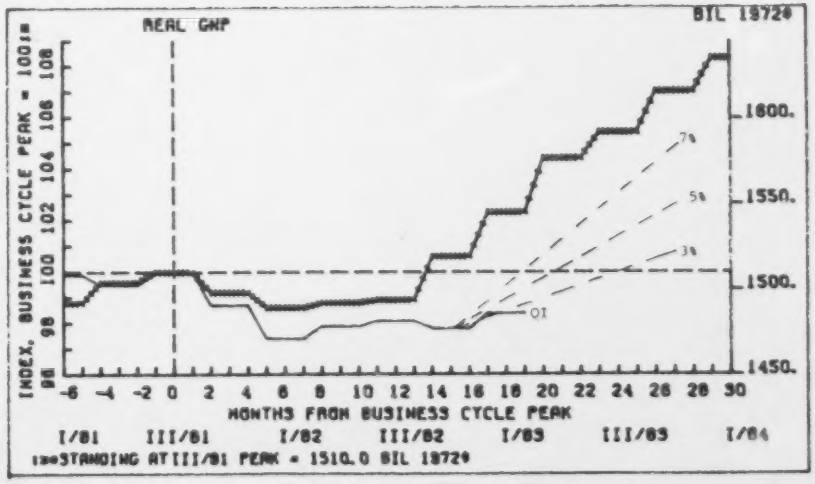


CHART 12

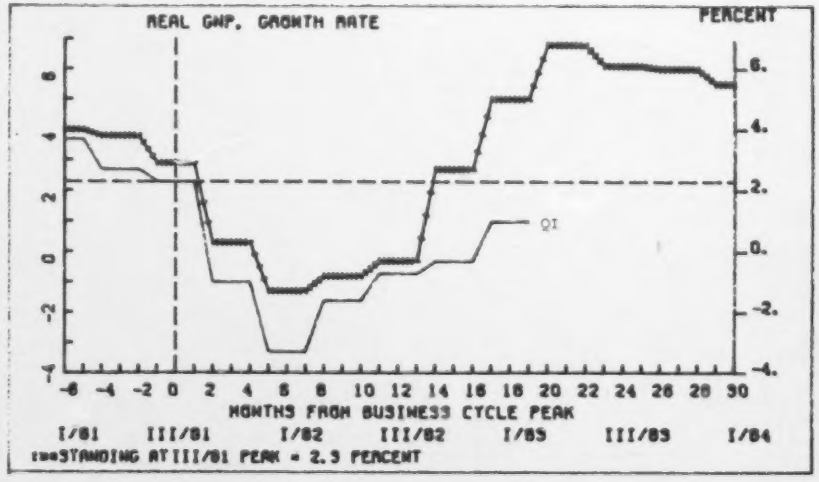

REAL GNP, GROWTH RATE
PERCENT
8 6 4 2 0 -2 -4
6.
4.
2.
0.
-2.
-4.
QI
-6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
MONTHS FROM BUSINESS CYCLE PEAK
I/81 III/81 I/82 III/82 I/83 III/83 I/84
STANDING AT III/81 PEAK = 2.3 PERCENT

CHART 13

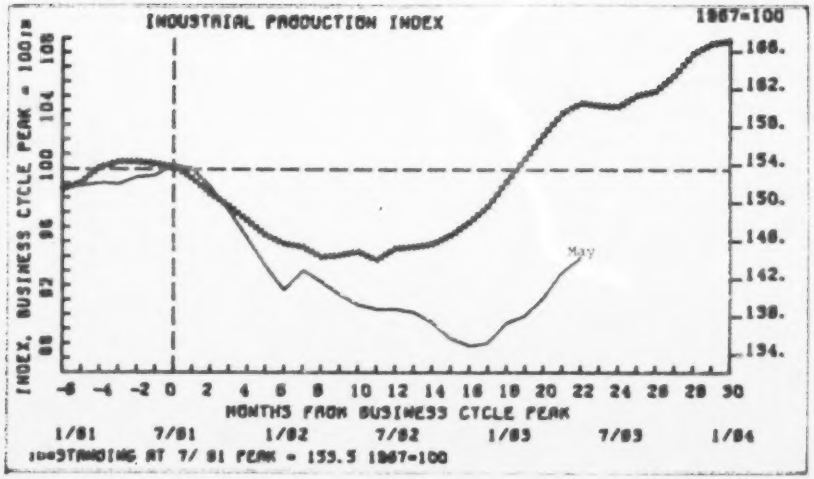


CHART 14

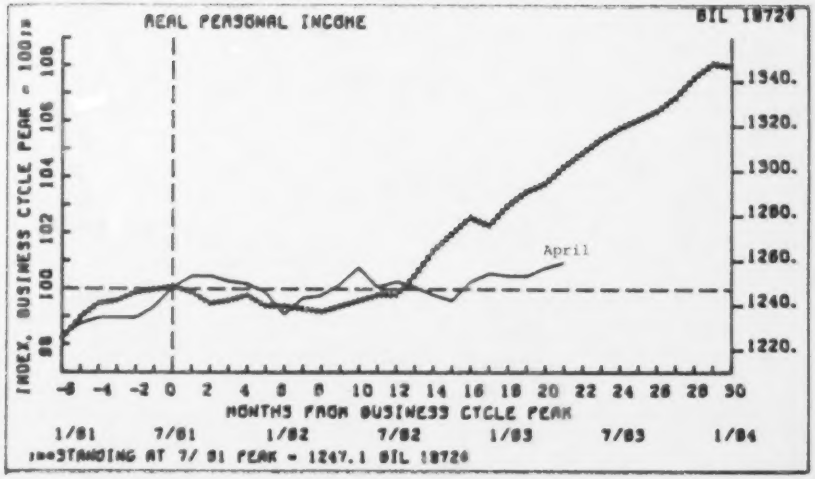


CHART 15

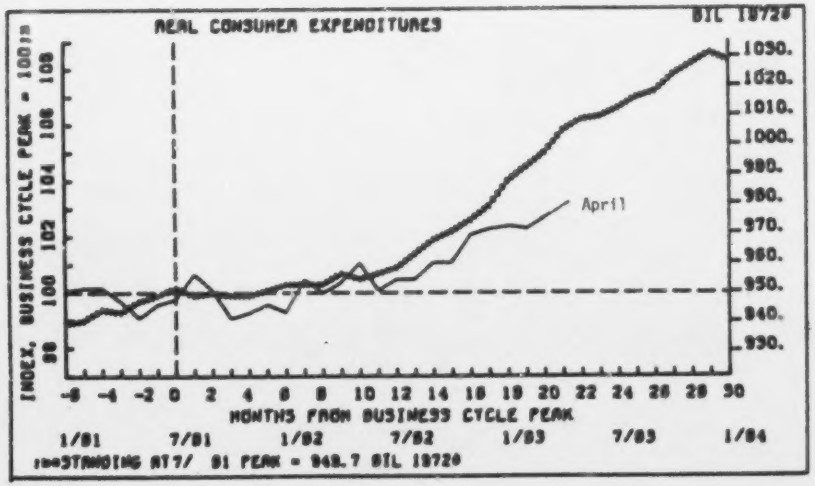


CHART 16

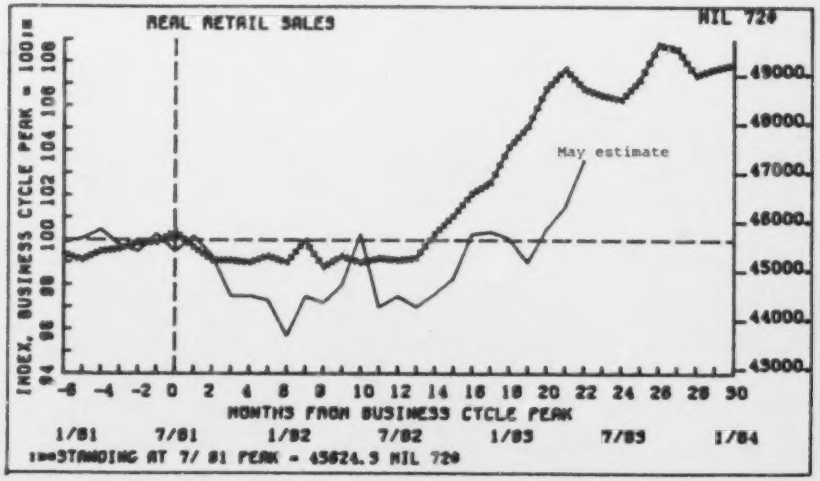


CHART 17

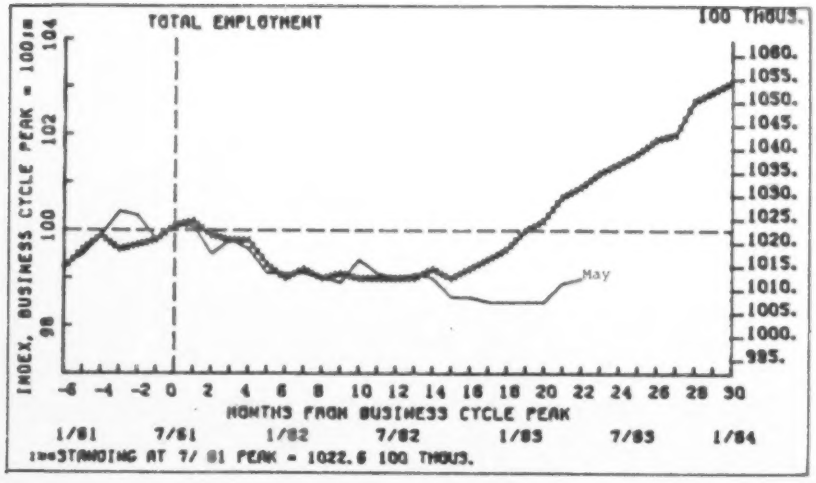


CHART 18

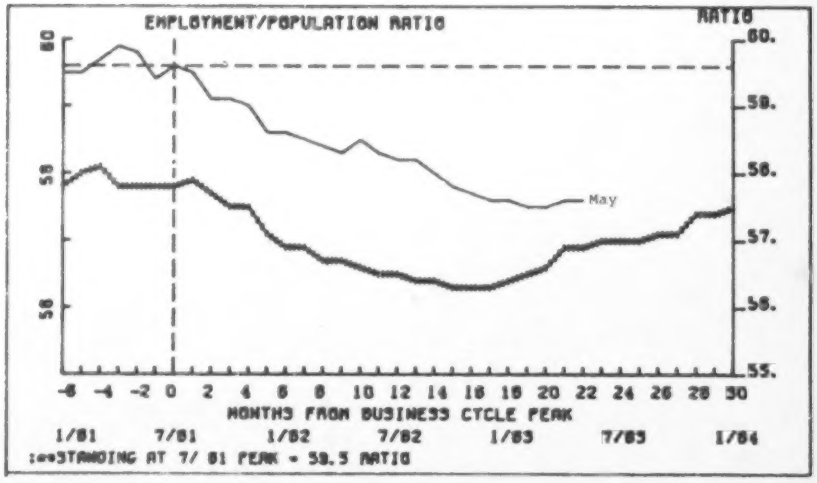


CHART 19

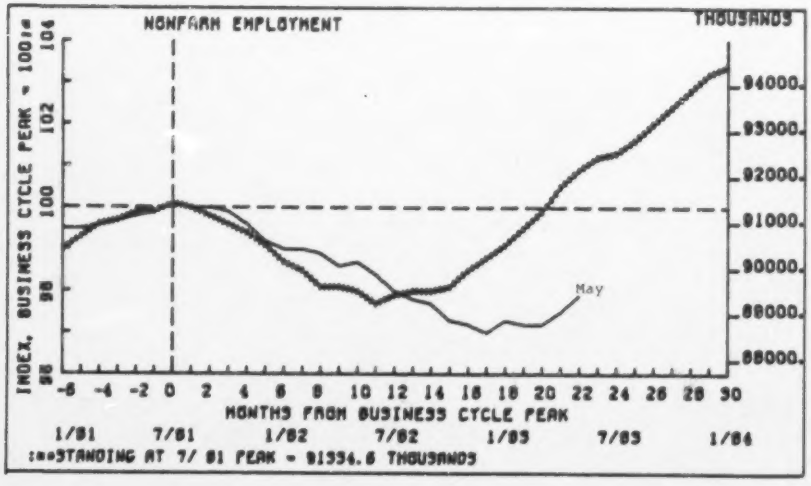


CHART 20

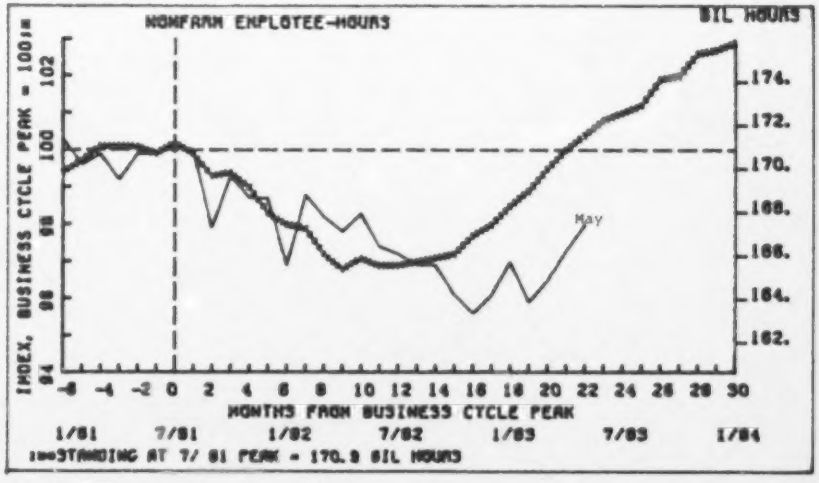


CHART 21

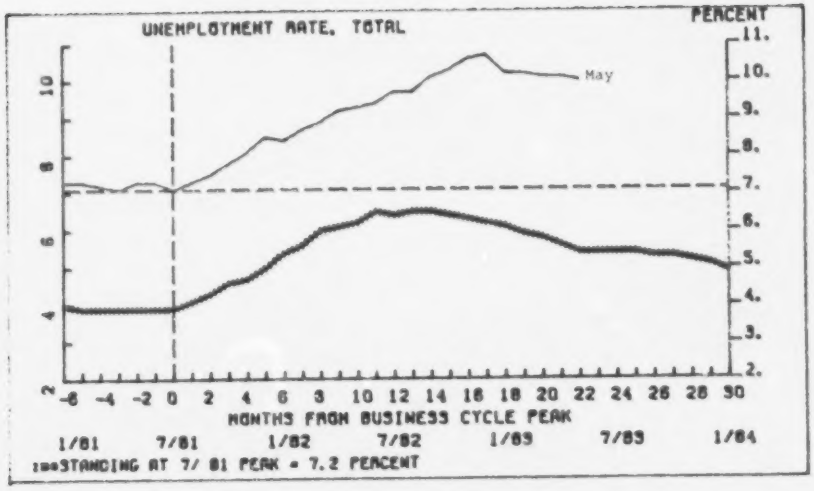

UNEMPLOYMENT RATE, TOTAL
PERCENT
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 7.2 PERCENT

CHART 22

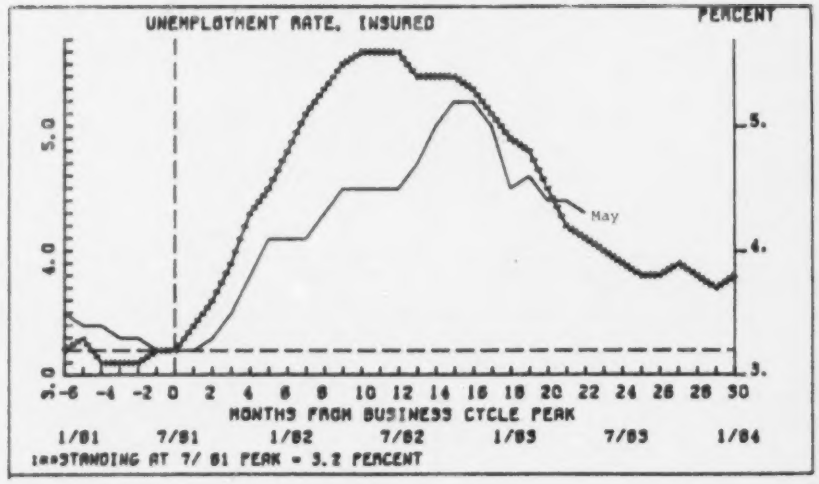

UNEMPLOYMENT RATE, INSURED
PERCENT
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 3.2 PERCENT

CHART 23

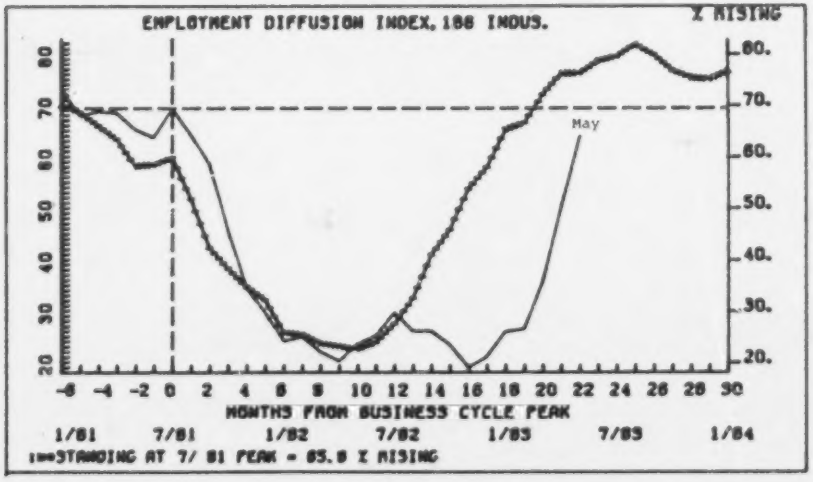

EMPLOYMENT DIFFUSION INDEX, 188 INDUS.
% RISING
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 85.8 % RISING

CHART 24

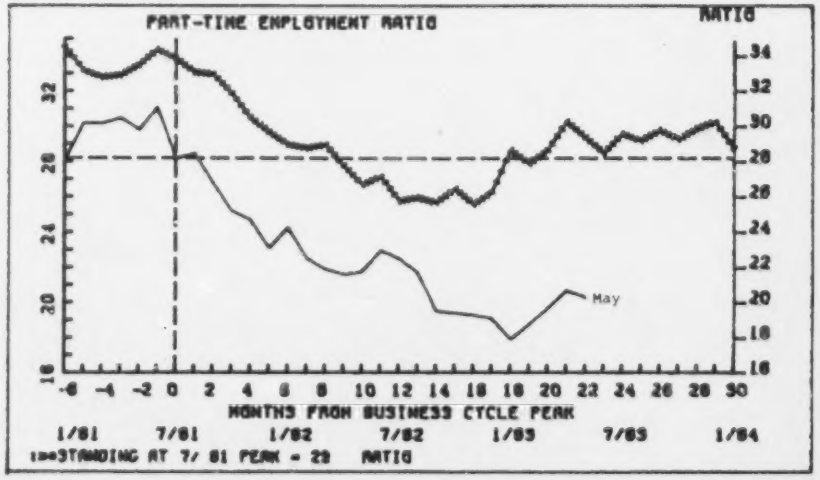

PART-TIME EMPLOYMENT RATIO
RATIO
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 28 RATIO

CHART 25

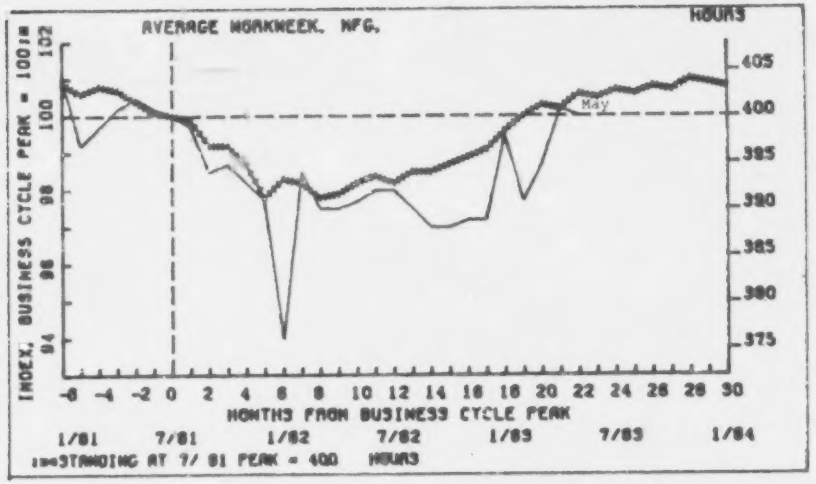

AVERAGE WORKWEEK, MFG.
HOURS
INDEX, BUSINESS CYCLE PEAK = 100
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
100=STANDING AT 7/ 81 PEAK = 400 HOURS

CHART 26

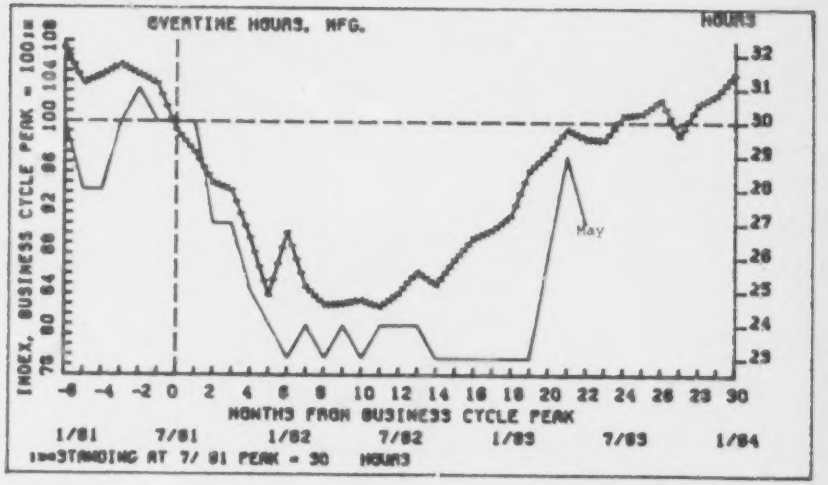

OVERTIME HOURS, MFG.
HOURS
INDEX, BUSINESS CYCLE PEAK = 100
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
100=STANDING AT 7/ 81 PEAK = 30 HOURS

CHART 27

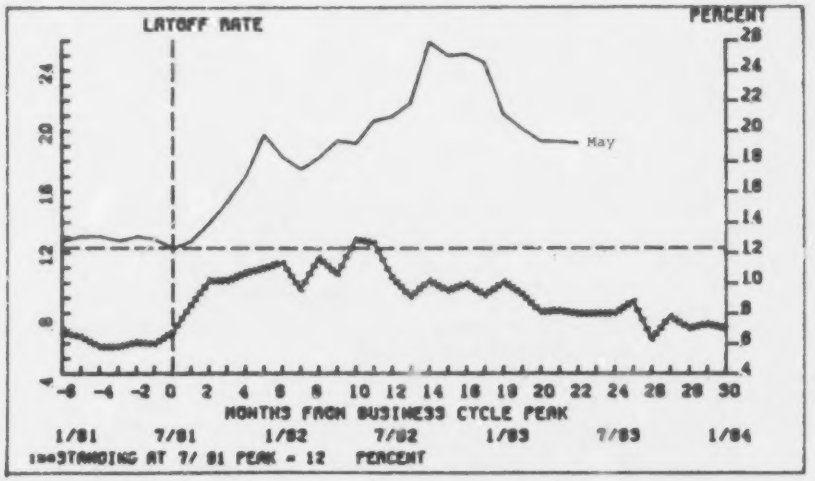


CHART 28

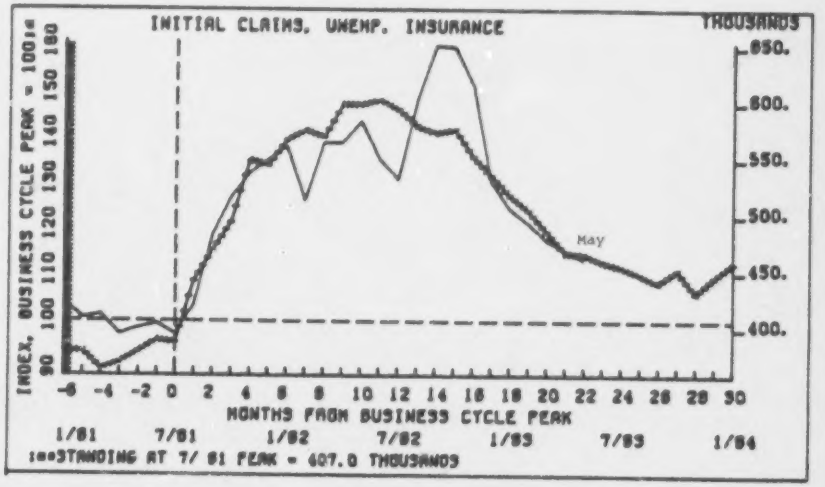

INITIAL CLAIMS, UNEMP. INSURANCE
THOUSANDS
INDEX, BUSINESS CYCLE PEAK = 100
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
100=STANDING AT 7/ 81 PEAK = 407.0 THOUSANDS

CHART 29

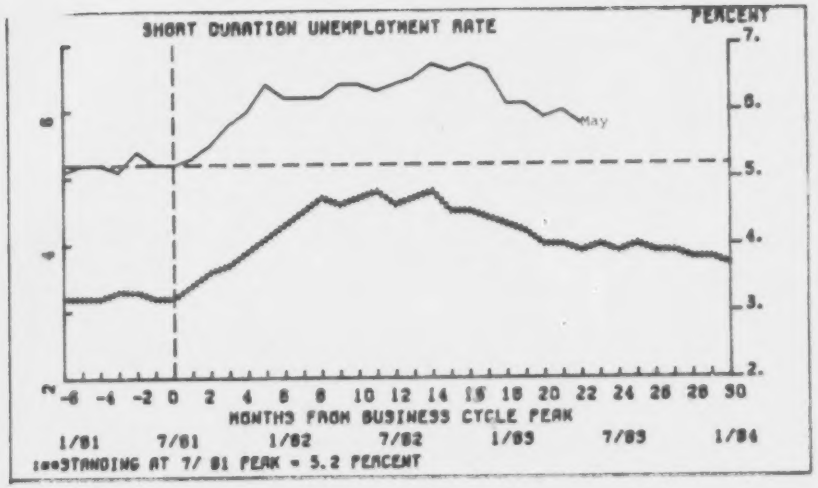

SHORT DURATION UNEMPLOYMENT RATE
PERCENT
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 5.2 PERCENT

CHART 30

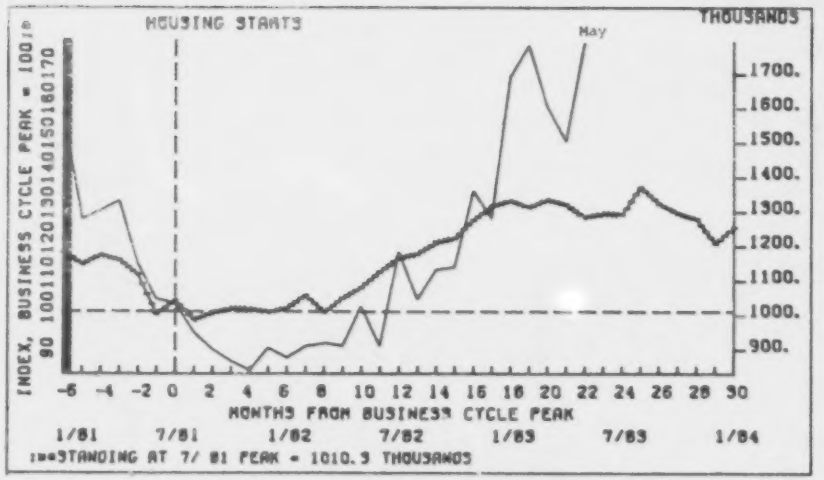

HOUSING STARTS
THOUSANDS
INDEX, BUSINESS CYCLE PEAK = 100
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 1010.9 THOUSANDS

CHART 31

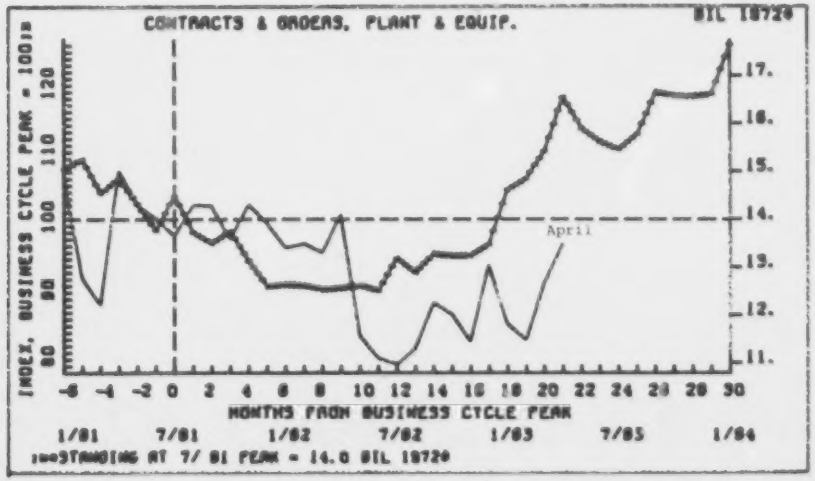

CONTRACTS & ORDERS, PLANT & EQUIP.
BIL 1972$
INDEX, BUSINESS CYCLE PEAK = 100
April
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 14.0 BIL 1972$

CHART 32

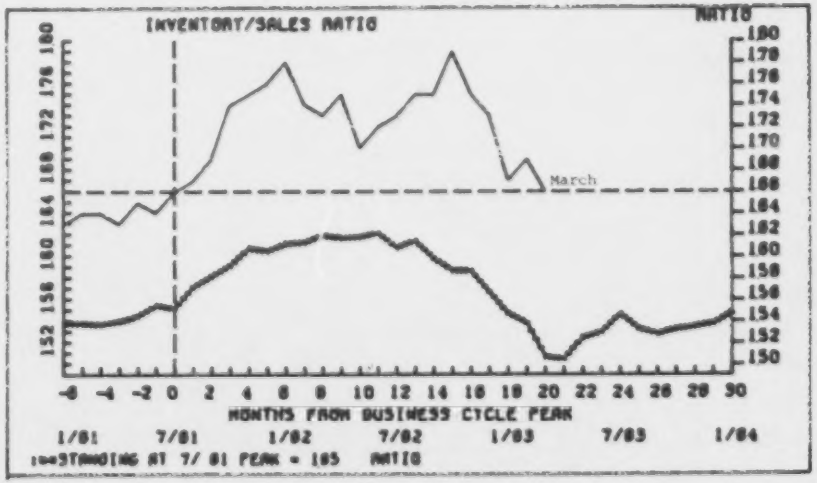

INVENTORY/SALES RATIO
RATIO
March
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 165 RATIO

CHART 33

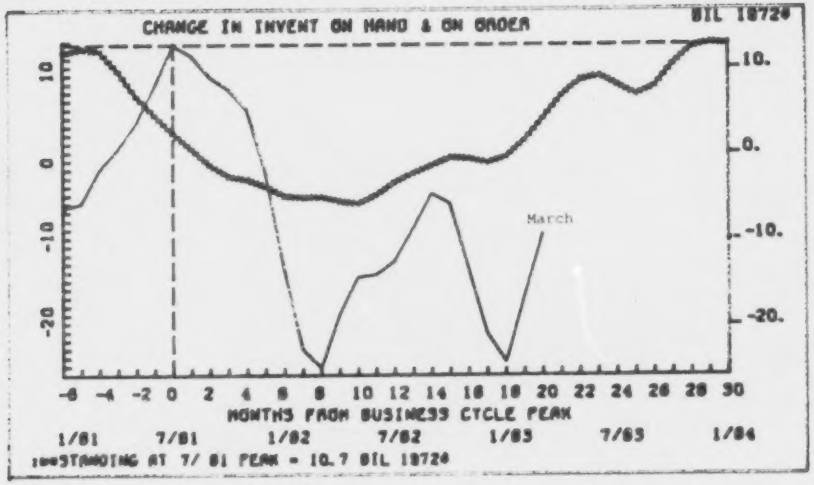


CHART 34

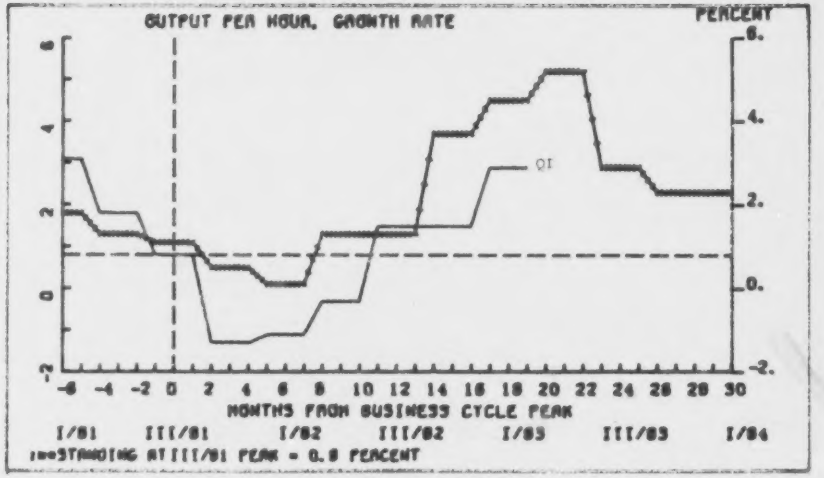


CHART 35

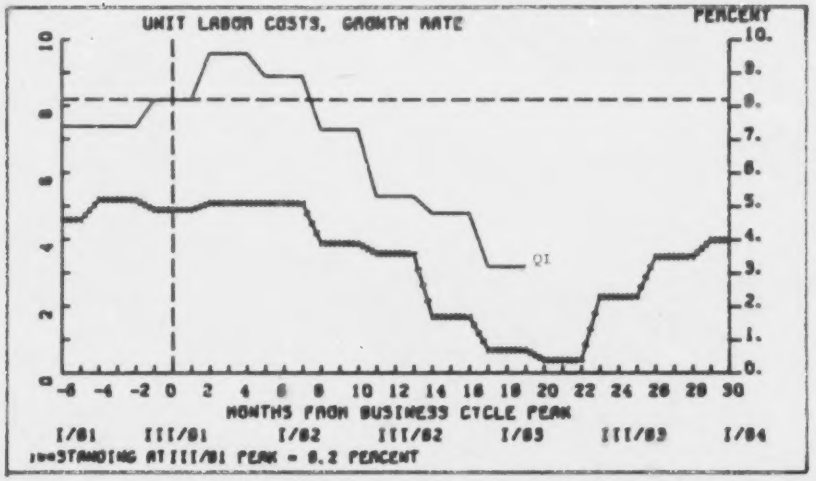


CHART 36

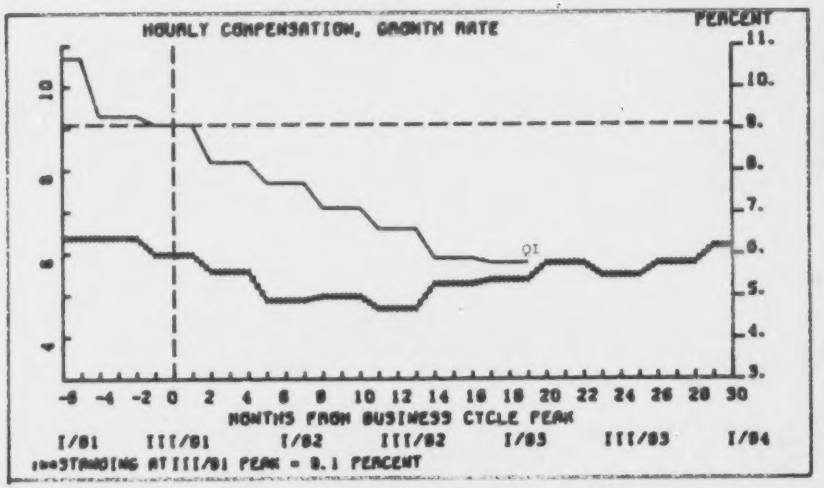


CHART 37

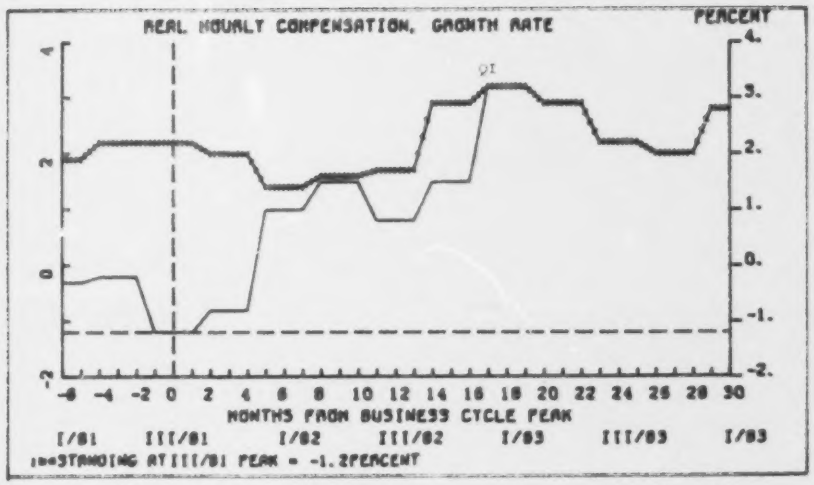

REAL HOURLY COMPENSATION, GROWTH RATE
PERCENT
QI
MONTHS FROM BUSINESS CYCLE PEAK
I/81 III/81 I/82 III/82 I/83 III/83 I/83
STANDING AT III/81 PEAK = -1.2PERCENT

CHART 38

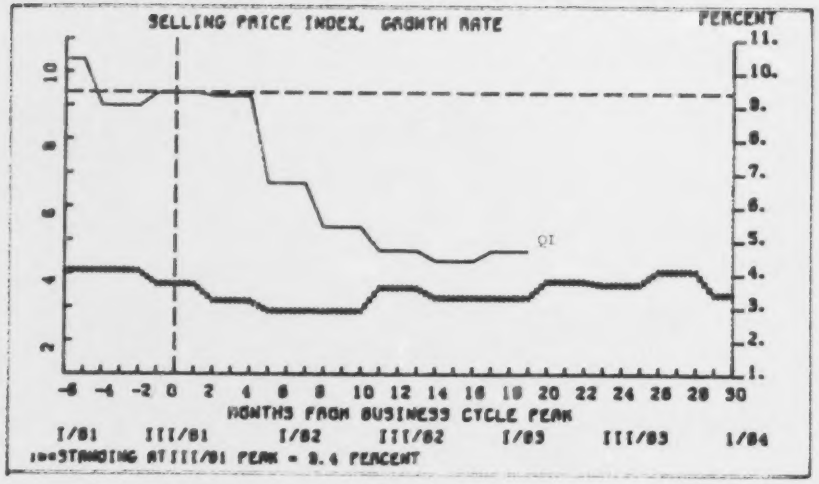

SELLING PRICE INDEX, GROWTH RATE
PERCENT
QI
MONTHS FROM BUSINESS CYCLE PEAK
I/81 III/81 I/82 III/82 I/83 III/83 1/84
STANDING AT III/81 PEAK = 9.4 PERCENT

CHART 39

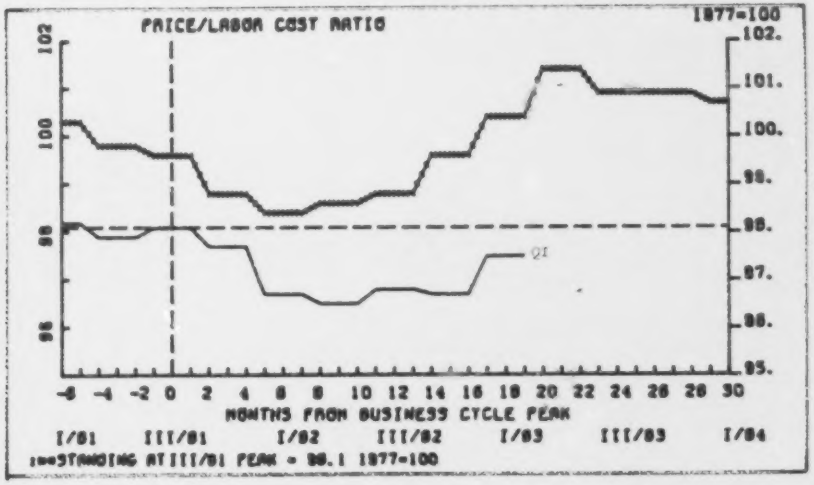

PRICE/LABOR COST RATIO
1977=100
QI
MONTHS FROM BUSINESS CYCLE PEAK
I/81 III/81 I/82 III/82 I/83 III/83 I/84
STANDING AT III/81 PEAK = 98.1 1977=100

CHART 40

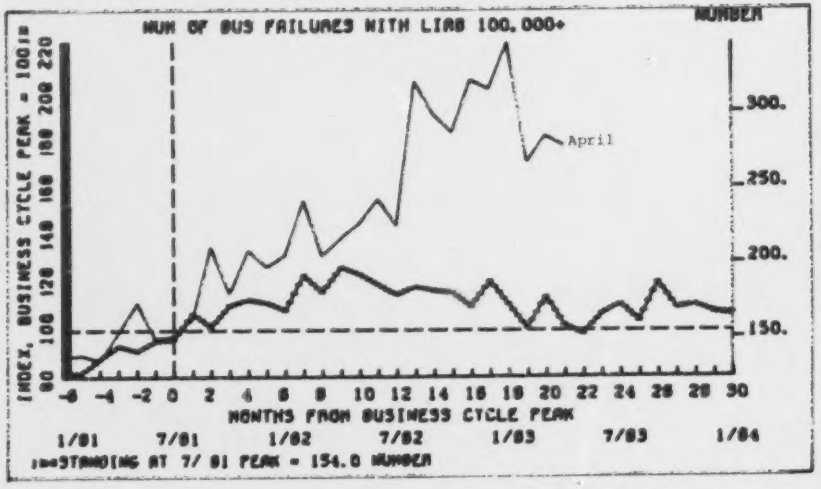

NUM OF BUS FAILURES WITH LIAB 100,000+
NUMBER
INDEX, BUSINESS CYCLE PEAK = 100
April
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 154.0 NUMBER

CHART 41

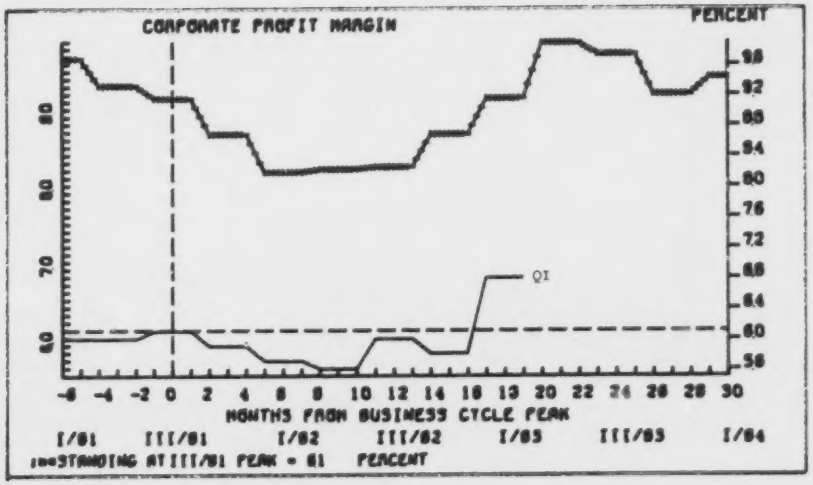

CORPORATE PROFIT MARGIN
PERCENT
QI
MONTHS FROM BUSINESS CYCLE PEAK
I/81 III/81 I/82 III/82 I/83 III/83 I/84
STANDING AT III/81 PEAK = 81 PERCENT

CHART 42

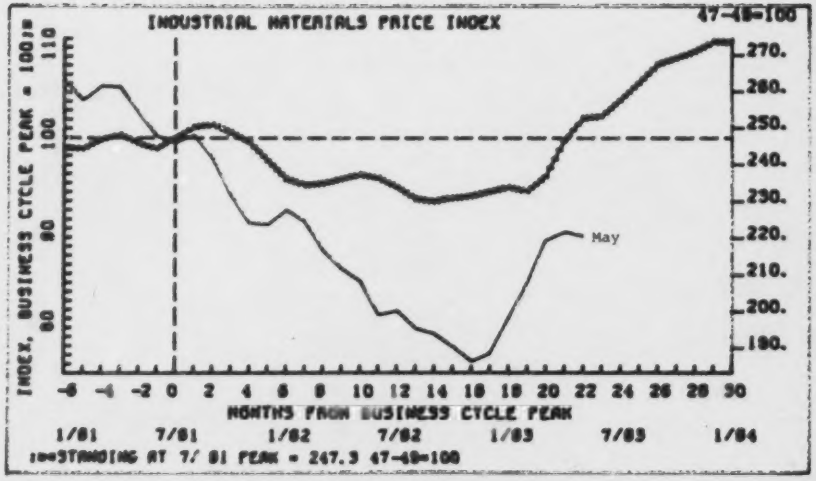

INDUSTRIAL MATERIALS PRICE INDEX
47-48=100
INDEX, BUSINESS CYCLE PEAK = 100
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 247.3 47-48=100

CHART 43

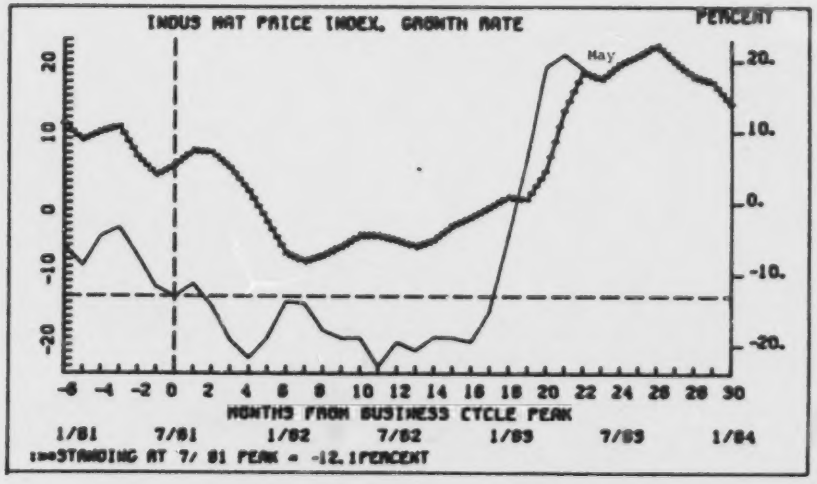

INDUS MAT PRICE INDEX, GROWTH RATE
PERCENT
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = -12.1PERCENT

CHART 44

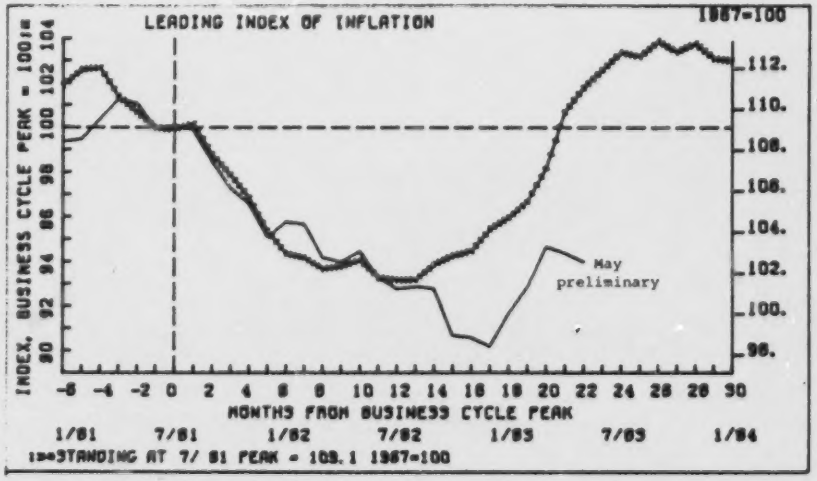

LEADING INDEX OF INFLATION
1987=100
INDEX, BUSINESS CYCLE PEAK = 100
May
preliminary
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 108.1 1987=100

CHART 45

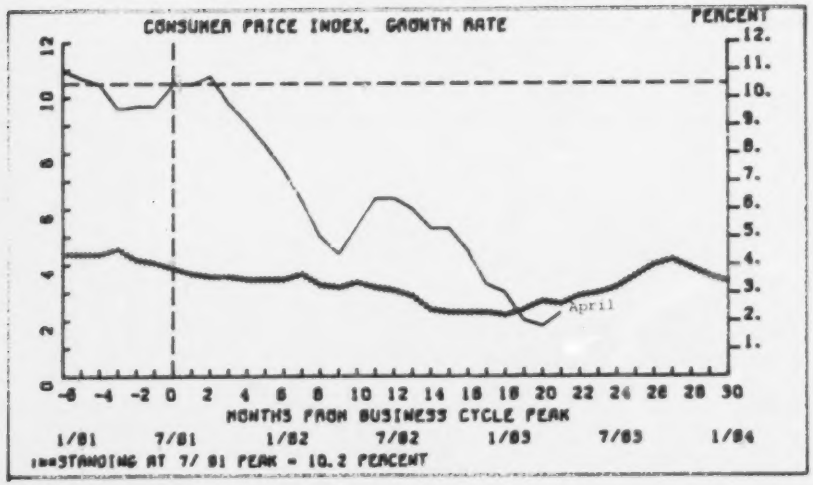

CONSUMER PRICE INDEX, GROWTH RATE
PERCENT
April
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 10.2 PERCENT

CHART 46

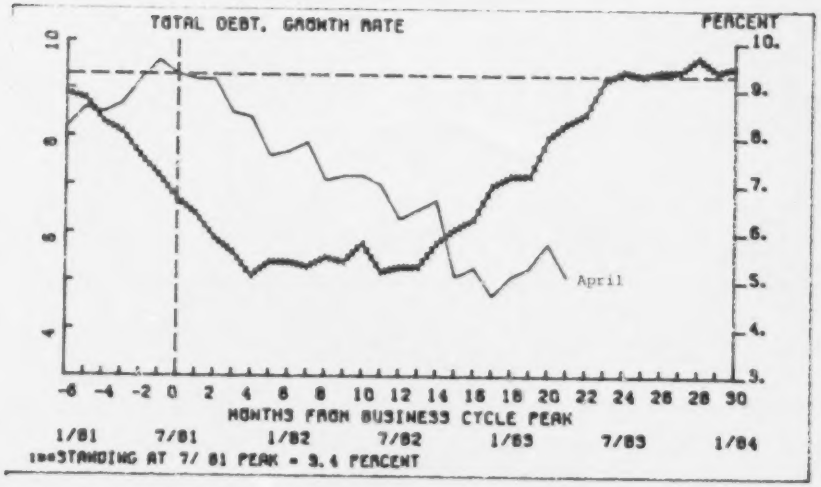

TOTAL DEBT, GROWTH RATE
PERCENT
April
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 9.4 PERCENT

CHART 47

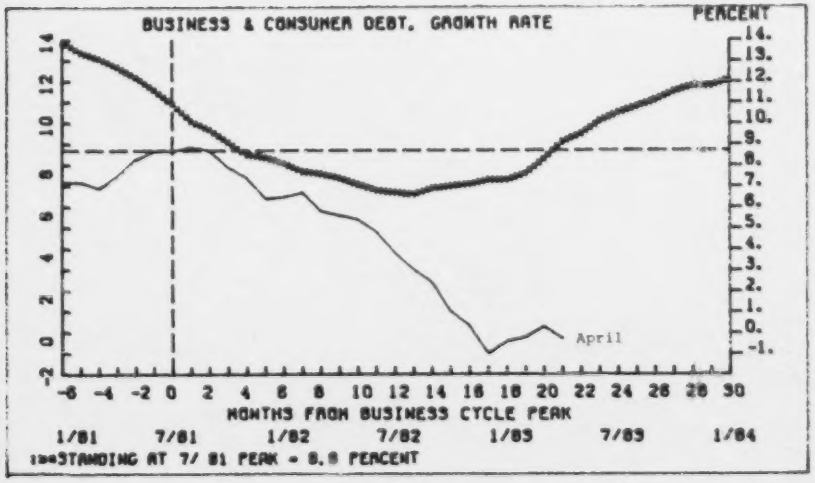

BUSINESS & CONSUMER DEBT, GROWTH RATE
PERCENT
April
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 8.8 PERCENT

CHART 48

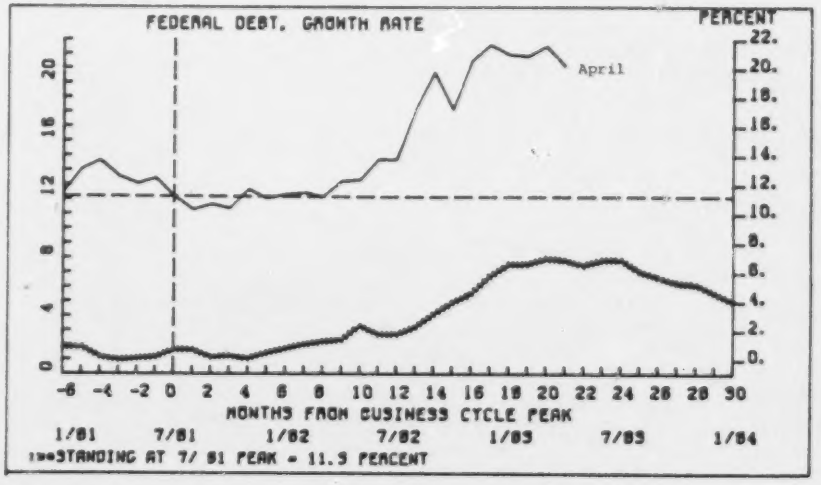

FEDERAL DEBT, GROWTH RATE
PERCENT
April
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 11.3 PERCENT

CHART 49

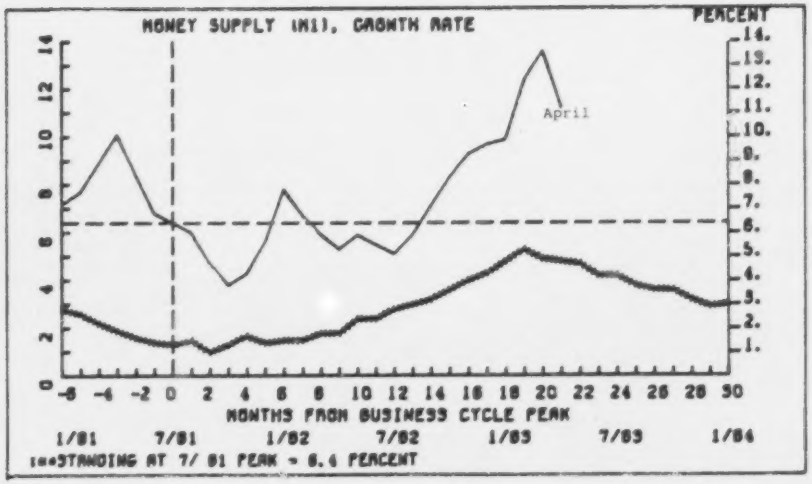

MONEY SUPPLY (M1), GROWTH RATE
PERCENT
April
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 8.4 PERCENT

CHART 50

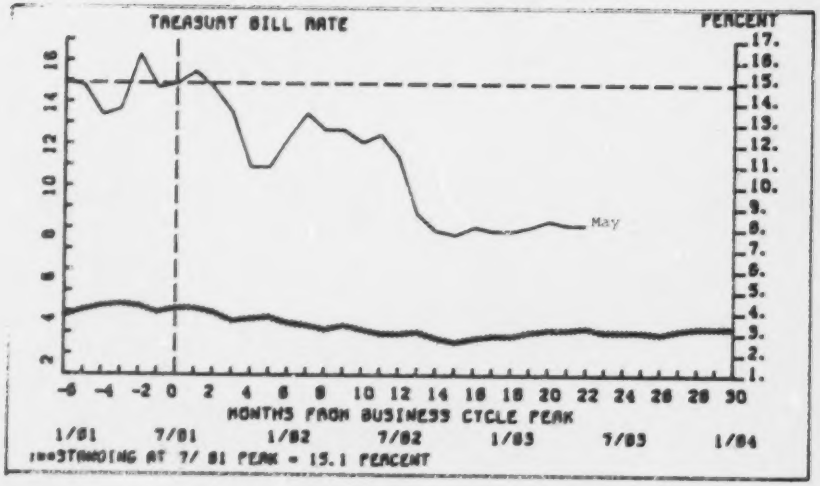

TREASURY BILL RATE
PERCENT
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 15.1 PERCENT

CHART 51

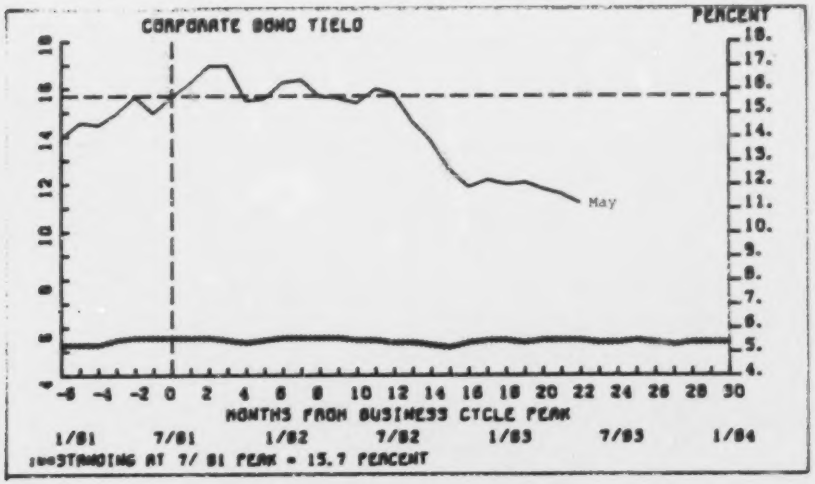
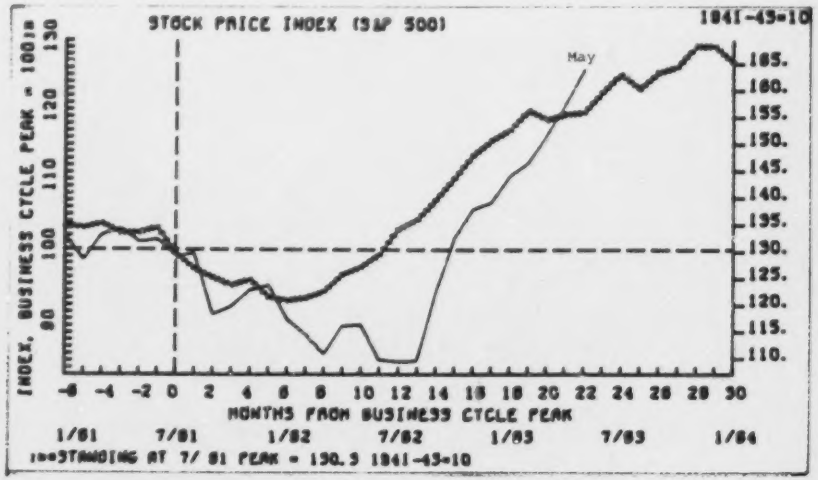

CORPORATE BOND YIELD
PERCENT
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 15.7 PERCENT

CHART 52


STOCK PRICE INDEX (S&P 500)
1941-43=10
INDEX, BUSINESS CYCLE PEAK = 100
May
MONTHS FROM BUSINESS CYCLE PEAK
1/81 7/81 1/82 7/82 1/83 7/83 1/84
STANDING AT 7/ 81 PEAK = 130.5 1941-43=10

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The Rutgers Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on domestic U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the six other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
808 Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the later stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisions contained in this report help one anticipate what is typical and distinguish it from the unusual.

Other CIBCR publications include International Economic Indicators, a monthly sixty page data compilation on the seven major industrial countries, and Inflation Watch, a bimonthly report designed to promote an understanding of inflation, prepared in collaboration with the American Enterprise Institute. Address all correspondence concerning subscriptions to the Center for International Business Cycle Research, 808 Uris Hall, Columbia University, New York, NY 10027

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RECESSION - RECOVERY WATCH...

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Dr. Geoffrey H. Moore
Director

Vol. 5, No. 4
August 1983

SUMMARY

The record of upturns in comprehensive measures of economic activity supports the recent decision by the National Bureau of Economic Research that the recession ended in November 1982. The Center's signal system also confirms that decision. Additional measurements show that the recession was similar to five other sharp recessions, but was not the most severe since the Depression of the 1930s. Comparisons of the current recovery with earlier recoveries reveal that leading indexes have been doing better than average, while measures of output, employment, real income and sales are close to average. Some slowdown after the end of the year can be expected, but the ingredients of a sustained expansion seem to be in place. Inflation indicators are rising, pointing to a 4% rate of gain in consumer prices later this year.

The Recession Is Over

On July 8, 1983 the National Bureau of Economic Research announced that its business cycle dating group had decided that November 1982 marked the trough of the recession. Apart from selecting the month, the committee had to determine that the current upswing was likely to reach the dimensions of previous expansions in a chronology that covers 35 business cycles extending back to 1834. The relevant dimensions are duration, amplitude and scope. The immediately preceding expansion, from July 1980 to July 1981, came close to the minimum in these respects. Hence the implied judgment was that the current upswing would at least meet that standard and hopefully exceed it.

The evidence considered, some of which was cited in the committee's report, included the fact that a collection of comprehensive measures showed that output, employment, income and trade had risen significantly from lows reached during 1982 or early 1983. Some of these measures, notably personal income and consumer spending in real terms, had already exceeded their previous peaks, although the majority had not. Also, the recovery had reached a large proportion of industries. In June, three-fourths of the 186 industries covered in the nonfarm employment survey reported an increase in employment during the preceding six months.

The determination of the November 1982 date hinged upon the evidence in Table A. Some types of activity reached their lows in October or before, others in December or February. November was not only around the center of this array, but was also the low month for industrial production and employee-hours in nonfarm establishments. The latter implied, since output per hour in nonfarm industry was increasing during this period, that a monthly index of nonfarm production, if available, would probably have reached its low in November or before. Quarterly data also supported the choice of a month within the fourth quarter. Once the November choice was made, the committee had no difficulty deciding that the fourth quarter was the trough date for the quarterly business cycle chronology.

The committee's decision enables us to complete our standard table of measures of the depth, duration and diffusion of recessions (Table B). The entries for the 1981-82 recession justify placing it among the sharp recessions in our capsule history. They do not justify classifying it as a depression, nor even as the most severe recession since the 1930s. The 1973-75 recession tops it in nearly all respects except the level of the unemployment rate, which has been subject to a long-run upward drift created by changes in the character of the labor force unrelated to the severity of the recession. The increase in the unemployment rate during the recession is a better measure of how much unemployment the recession created, and the 4 percentage point increase from 7% to 11% was no bigger than the average increase in the five previous sharp recessions.

All Signals Go for Recovery

With the June figures for the leading and coincident indexes producing growth rates well above the third signal level of 4.3%, all three signals of recovery have now been passed. The employment indexes, available July 8, were the first to show this, and they provided timely support for the decision by the National Bureau of Economic Research that the recession trough came in November 1982. The Commerce Department's indexes, released July 29, showed much the same picture. The six-month smoothed growth rates for June were:

	CIBCR Employment Indexes	BCD Indexes
Leading	13.2	17.4
Coincident	6.8	6.0

The question may be raised whether a signal that confirms a recovery some seven months after it began is of any value. One answer is that the third signal, by definition, means that both the leading and coincident indexes are growing significantly more rapidly than their long-run trend rate, which is 3.3% per year. Judging from the historical record, when this happens a sustained expansion of the economy is likely to ensue. This is a reasonable expectation to adhere to until there is evidence that cost/price or other imbalances in the economy are bringing the expansion to an end.

Recovery Patterns

In judging the prospects for a sustained expansion, it is useful to switch our historical comparisons so that they start from the business

Table A

Dates of Tentative Cyclical Troughs in Twenty-two Series
On Aggregate Economic Activity, 1982

Date of Trough	Monthly Series	Quarterly Series[a]
October 1981	Personal consumption expenditures[b]	
January 1982	Retail sales[b]	
February 1982		GNP[b] Disposable personal income[b]
August 1982		Final sales[b]
October 1982	Personal income[b,c] Personal income less transfer payments[b] Manufacturing and trade sales[b]	
November 1982	Industrial production index Coincident employment index (CIBCR) Wages in goods industries[b] Employees, nonfarm establishments Insured unemployment rate, inverted[d]	Goods output[b]
December 1982	Coincident index (BCD) Employees, nonfarm establishments Employees, goods industries Total unemployment rate, inverted	
February 1983	Total employment, including armed forces Total civilian employment Nonfarm civilian employment	

---

[a] mid-month of trough quarter

[b] In 1972 dollars

[c] January 1982 slightly lower

[d] Same as October 1982

Center for International Business Cycle Research, Columbia Business School, July 7, 1983.

Table B

A capsule history of recessions and depressions, 1920-1982

	How long? (Mos.)	How deep?					How wide? (% of industries with employment decline)
		Real GNP (%)	Industrial production (%)	Nonfarm employment (%)	Unemployment rate High (%)	Unemployment rate Increase (%)	
1. The Great Depression (1933)	43	-33	-53	-32	25	+22	100
2. Two major depressions (1921, 1938)	16	-13	-32	-11	16	+10	97
3. Five sharp recessions (1924, 1949, 1954, 1958, 1975)	12	-3	-13	-4	7	+4	90
4. Five mild recessions (1927, 1945, 1961, 1970, 1980)	10	-2	-8	-2	6	+3	77
5. 1981-82 recession	16	-3	-12	-4	11	+4	79

Explanation of table:

The first column is the period from the peak of the business cycle to the trough, as determined by the National Bureau of Economic Research. The next three columns show the percentage decline in output or employment from its high month or quarter to its low. For unemployment the highest monthly figure reached is shown (col. 5) as well as the increase from the low to the high (col. 6). The last column is the percentage of industries that experienced a decline in employment over a six-month interval. The figure shown is the highest percentage reached during the depression or recession.

All the entries on lines 2, 3 and 4 are averages covering the respective depressions or recessions.

Center for International Business Cycle Research, Columbia Business School, July 1983.

cycle trough rather than from the preceding business cycle peak. Most of the leading indicators have long since exceeded their levels at the preceding peak (July 1981) and some of the coincident indicators have done so also. Since this is one of the marks of a genuine business cycle expansion, such comparisons are still of interest. Nevertheless, by starting the comparisons from the troughs we can focus more clearly on the developments that sustain expansion as well as those that bring it to an end. Accordingly, the charts in this issue make comparisons starting from business cycle troughs and going on for 30 months.

On this basis, the leading indexes have been rising at a pace exceeding their average performance in the six preceding recoveries, 1949-79[1]. This is true of both the Center's leading employment index, which is restricted to employment indicators such as the average workweek, and of the Commerce Department's index, which includes financial and other indicators. The coincident indexes are tracking the average pattern very closely. Real GNP through the second quarter has under-shot the average[2], and so has real personal income, but industrial production, real retail sales and consumer spending are right on target. All of the employment and unemployment indicators are behaving like guided missiles, where the guide is the average pattern of previous recoveries.

This previous pattern would lead one to expect some slowing down in rate of growth as the expansion proceeds, perhaps starting around the end of this year. The leading indexes normally show this slowdown first, but the June figures for the Commerce index gave only a slight hint of it and the July figures for the Center's index none at all. Another early warning signal to be looked for is a decline in the Commerce Department's ratio of coincident to lagging index, but as of June this was rising sharply (Chart 10). This ratio reflects imbalances developing in the economy that cause slowdowns or recessions, such as inventories rising faster than sales or costs rising faster than prices. No such imbalances have yet appeared (see Charts 32 and 39).

If the expansion continues to track the average pattern of its predecessors, then precursors of a slower rate of growth should begin to appear later this year, with the slower rates themselves appearing early in 1984. According to the average pattern for real GNP in Chart 11, an annual growth rate of 8% through the fourth quarter of 1983, and then 4% to the second quarter of 1985 would just keep up with the average.

Inflation Take-Off

The rate of inflation in consumer prices, after dropping far more sharply than in the average recession, now seems to be following the gradual upward path it has traced in the average expansion (Chart 45). The low to date, 1.8% in March, came four months after the business cycle trough last November, preceding the upturn in the average pattern by a

---

[1]We exclude the 1980-81 recovery from the averages since it lasted only 12 months, and beyond that point the averages would be including the 1981-82 recession.

[2]Note that the growth rates in Chart 12, as in other quarterly series, is a "two-quarter smoothed rate," which is less subject to extreme movements and reversals than the commonly used quarterly change.

month. The rise to 2.5% in June is modest, but experience suggests it will continue. So does the Center's leading index of inflation, which has extended its uptrend through July (Chart 44). Like the other leading indexes, but more disturbing, this index has been rising faster than its average pattern.

According to the three components of the leading inflation index, inflationary pressures are beginning to build in the labor market, in the commodity markets, and in the financial markets. The percentage employed jumped sharply in June and continued up in July, so that it is now higher than at any business cycle peak prior to 1980. A high figure implies more earnings available to spend relative to the population to be supported, and also a smaller potential supply of labor not already employed. These conditions can lead to higher wage costs and prices. Prices of industrial materials, always sensitive to market conditions, have recovered sharply from last year's depressed levels, raising costs to users (Charts 42 and 43). The growth of debt, the third component of the index, jumped to nearly 7% in June, boosted by the accelerated growth in Federal debt (Charts 46-48). The annualized growth rate in Federal debt climbed to 27% in June, well above the previous record set in 1975.

Although the growth rate in business, consumer and the Federal debt in June only just reached its average level in preceding expansions (Chart 46), it could readily surpass that average in the months ahead, unless the rapid growth of Federal debt is curbed. Slower growth of Federal debt from this point in past recoveries has partly offset the faster growth of business and consumer debt. The upward drift in interest rates in recent months suggests that the markets have some doubt about how far this offset will go (Charts 50, 51).

The leading inflation index is one way of putting these considerations together. Judging from its past relationship to the inflation rate, the upswing through July would be associated with a rise of about two percentage points in the inflation rate. This would bring the CPI rate to the neighborhood of 4% late this year.

Costs, Prices and Productivity

The deceleration in labor costs per unit of output has continued from the recession into the recovery, as it usually does (Chart 35). Rising productivity growth and declining gains in hourly compensation turned the trick. But the declining wage gains did not mean lower real wages; real hourly compensation has been growing, and at rates faster than in the average recovery. Wage earners have benefited, and so have employers, because selling prices have begun to improve relative to costs. Profit margins have picked up, and the number of large business failures has declined.

RECESSION-RECOVERY PATTERN CHARTS

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RECESSION - RECOVERY PATTERNS

———————— Current recovery to date (business cycle trough: November 1982 or IV Q 1982)

//////////// Average of six recoveries (1949-54, 1954-57, 1958-60, 1961-69, 1970-73, 1975-80)

How to Read the Charts

The charts show how the current recovery, dated from November 1982, compares with the average previous recovery over the same length of time. They also show how the average recovery developed beyond this point, and hence what a forecast based on that average would look like. Forecasts based upon other information can be evaluated against this background.

The horizontal time scale in each chart shows the number of months before (-) or after the business cycle trough (0). For the current cycle November 1982 is zero, May 1983 is Month 6, etc. The vertical scale on the left side for most series is an index with the three-month average centered on the business cycle trough date equal to 100. This three-month average is called the peak standing. For the current cycle, the figures plotted are indexes with the October to December 1982 average equal to 100. Each of the previous cycles are converted to indexes in the same way, and then the corresponding months are averaged for the six cycles, 1949-80. Quarterly series (e.g., GNP) are treated in the same way as monthly except that quarterly business cycle trough dates are used and each quarter is plotted as a horizontal line for three months.

When the figures are percentages (e.g., the unemployment rate, the inflation rate, or GNP growth rate), the figures shown represent the actual levels of the data, rather than deviations from trough standings.

On all charts the right-hand scale applies to the current cycle, so that one can see where new figures or forecasts would be placed. Also, this scale shows how the averages for previous recoveries would translate to current levels. The November 1982 trough standing for the current cycle is shown at the bottom of the chart for reference purposes.

The averages include only six cycles rather than seven, because the 1980-81 recovery lasted only 12 months from trough (July 1980) to peak (July 1981). Averages extending beyond 12 months would begin to include the 1981-82 recession.

All the growth rates shown are six-month smoothed rates (or two-quarter smoothed), obtained by dividing the current month's index by the average for the twelve preceding months, and expressing the result as a compound annual rate.

Data in some charts are a month or a quarter more up-to-date than in Table 1.

RECESSION/RECOVERY STATUS UP TO 8 MONTHS AFTER THE BUSINESS CYCLE TROUGH

PERCENTAGE ABOVE (+) OR BELOW (-) THE PRECEDING BUSINESS CYCLE TROUGH, UNLESS OTHERWISE NOTED

		MONTHS AFTER BUSINESS CYCLE TROUGHS	EXPANSIONS STARTING OCT 1948	MAY 1954	APR 1958	FEB 1961	EXPANSIONS STARTING JULY 1970	MAR 1975	NOV 1980	AVG. 1949 -75	CURRENT EXPANSION STARTING NOV 1982	LAST MONTH OR QUARTER AVAIL.
I.	COMPOSITE INDEXES											
1.	LEADING EMPLOYMENT INDEX (CIBCR)	08	10.5	7.5	9.8	7.7	4.8	8.8	7.1	8.2	12.1	07/83
2.	COINCIDENT EMPLOYMENT INDEX (CIBCR)	08	12.8	4.9	7.2	4.5	1.4	4.6	4.4	5.9	7.5	07/83
3.	LEADING INDEX (BCD)	07	8.0	10.1	12.6	6.6	7.3	12.1	3.9	9.7	11.6	06/83
4.	COINCIDENT INDEX (BCD)	07	10.1	3.8	7.8	4.7	2.9	4.3	4.4	5.6	4.9	06/83
5.	LEADING EMPLOY. INDEX, GROWTH RATE *	08	13.8	11.0	11.7	10.1	5.1	11.2	8.7	10.5	16.0	07/83
6.	COINCIDENT EMPLOY. INDEX, GROWTH RATE *	08	17.9	7.1	8.0	5.4	1.0	4.4	4.1	7.3	9.9	07/83
7.	LEADING INDEX, GROWTH RATE *	07	18.2	17.2	17.9	8.8	10.0	15.4	2.8	14.6	17.4	06/83
8.	COINCIDENT INDEX, GROWTH RATE *	07	15.7	5.7	8.3	5.2	2.2	2.5	3.6	6.8	6.0	06/83
9.	LAGGING INDEX (BCD)	07	-0.8	-3.5	-5.1	-3.9	-6.4	-8.8	-1.5	-4.8	-7.6	06/83
10.	COINCIDENT/LAGGING RATIO *	07	132.1	115.7	103.8	95.6	104.4	111.8	122.0	110.6	127.0	06/83
II.	OUTPUT, INCOME AND SALES											
11.	REAL GNP	06	7.3	3.3	4.8	3.0	2.8	3.5	3.1	4.1	2.7	II/83
12.	REAL GNP GROWTH RATE *	06	9.6	3.8	6.8	4.4	3.5	2.8	3.8	5.1	3.8	II/83
13.	INDUSTRIAL PRODUCTION INDEX	07	14.1	4.6	11.7	7.5	3.8	8.8	7.4	8.4	7.9	06/83
14.	REAL PERSONAL INCOME	07	6.3	3.8	4.2	2.5	3.7	3.3	2.7	4.0	1.7	08/83
15.	REAL CONSUMER EXPENDITURES	06	2.9	3.0	2.5	1.8	2.8	2.9	2.4	2.8	3.4	05/83
16.	REAL RETAIL SALES	07	5.8	5.8	3.7	1.5	5.8	4.2	3.0	4.4	6.7	06/83
III.	EMPLOYMENT AND UNEMPLOYMENT											
17.	TOTAL EMPLOYMENT	08	2.3	1.4	1.3	0.3	0.7	1.4	1.7	1.2	2.1	07/83
18.	EMPLOYMENT/POPULATION RATIO *	08	56.6	56.6	56.2	56.0	57.1	56.5	58.7	56.5	58.5	07/83
19.	NONFARM EMPLOYMENT	08	4.0	1.0	2.1	1.7	1.0	1.4	1.3	1.8	1.8	07/83
20.	NONFARM EMPLOYEE-HOURS	08	5.3	1.4	3.1	2.1	0.8	1.9	1.7	2.4	2.6	07/83
21.	UNEMPLOYMENT RATE, TOTAL *	08	5.3	4.8	6.0	8.3	5.8	8.1	7.2	6.0	9.3	07/83
22.	UNEMPLOYMENT RATE, INSURED *	08	4.7	4.2	5.3	5.0	3.8	5.1	3.4	4.7	3.8	07/83
23.	EMPLOYMENT DIFFUSION INDEX, 186 IND. *	08	83.3	71.7	80.8	70.1	49.4	69.6	68.8	72.1	76.3	07/83
24.	PART-TIME EMPLOYMENT RATIO *	08			1.9	2.1	3.8	3.2	3.1	2.8	2.2	07/83
25.	AVERAGE WORKWEEK, MFG.	08	3.1	2.0	2.8	2.3	1.0	2.4	1.6	2.3	3.7	07/83
26.	OVERTIME HOURS, MFG.	08			44.2	23.8	8.7	20.8	10.5	24.4	34.8	07/83
27.	LAYOFF RATE *	08	0.5	1.2	0.8	0.8	0.8	1.6	1.3	0.9	1.7	07/83
28.	INITIAL CLAIMS, UNEMP. INSURANCE	08	-28.0	-18.3	-24.6	-24.1	-10.0	-25.8	-21.8	-21.8	-35.3	07/83
29.	SHORT DURATION UNEMPLOYMENT RATE *	08	4.0	3.4	4.1	4.3	4.4	5.3	5.2	4.2	5.5	07/83

RECESSION/RECOVERY STATUS UP TO 8 MONTHS AFTER THE BUSINESS CYCLE TROUGH

PERCENTAGE ABOVE (+) OR BELOW (-) THE PRECEDING BUSINESS CYCLE TROUGH, UNLESS OTHERWISE NOTED

		MONTHS AFTER BUSINESS CYCLE TROUGHS	EXPANSIONS STARTING OCT 1949	MAY 1954	APR 1958	FEB 1961	JULY 1970	MAR 1975	NOV 1980	AVG. 1949 -75	CURRENT EXPANSION STARTING NOV 1982	LAST MONTH OR QUARTER AVAIL.
IV.	INVESTMENT COMMITMENTS AND INVENTORIES											
30.	HOUSING STARTS	07	21.9	24.8	38.4	15.2	18.7	38.9	-1.6	26.3	38.3	06/83
31.	CONTRACTS & ORDERS, PLANT & EQUIP.	07	40.8	19.8	10.5	0.8	18.0	-4.1	-11.4	14.5	14.4	06/83
32.	INVENTORY/SALES RATIO, TIMES 10 *	06	14.4	15.4	15.3	15.1	16.6	17.1	16.3	15.7	16.0	05/83
33.	CH IN INVENT ON HAND & ON ORDER, BIL 72$ *	06	5.2	-0.7	6.2	7.2	5.1	-7.5	-5.2	2.6	-1.5	05/83
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
34.	OUTPUT PER HOUR, GROWTH RATE *	06	7.2	3.5	5.5	4.7	2.6	5.8	2.8	4.8	3.4	II/83
35.	UNIT LABOR COSTS, GROWTH RATE *	06	-1.2	-1.1	-1.6	-1.2	4.0	2.2	7.8	0.2	2.4	II/83
36.	HOURLY COMPENSATION, GROWTH RATE *	06	6.2	2.4	4.0	3.6	6.8	8.1	10.6	5.2	5.6	II/83
37.	REAL HOURLY COMPENSATION, GROWTH RATE *	06	5.5	3.4	2.8	2.4	2.6	0.3	-0.2	2.6	3.0	II/83
38.	SELLING PRICE INDEX, GROWTH RATE *	06	0.4	2.2	1.3	0.9	4.8	7.5	10.4	2.8	4.4	II/83
39.	PRICE/LABOR COST RATIO *	06	102.6	100.7	100.4	98.6	99.1	100.4	98.2	100.5	97.3	II/83
40.	BUSINESS FAILURES	07	-10.0	-4.0	-4.4	-5.8	-7.1	-6.8	8.4	-6.3	-18.7	06/83
41.	CORPORATE PROFIT MARGIN *	03	11.6	8.5	8.6	8.5	7.3	6.1	4.8	8.8	6.5	II/83
42.	INDUSTRIAL MATERIALS PRICE INDEX	08	9.1	5.2	10.1	2.4	-6.3	1.9	2.7	3.7	19.7	07/83
43.	INDUSTRIAL MAT PRICE INDEX, GROWTH RATE *	08	18.5	11.3	11.5	2.5	-11.1	0.4	-1.6	5.5	20.7	07/83
44.	LEADING INDEX OF INFLATION	08	10.8	3.6	8.0	2.3	3.0	5.3	3.8	5.5	8.3	07/83
45.	CONSUMER PRICE INDEX, GROWTH RATE *	07	0.5	-0.8	0.8	1.1	4.4	7.3	10.7	2.2	2.3	08/83
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
46.	TOTAL DEBT, GROWTH RATE *	07		4.4	6.1	5.8	8.1	8.8	8.8	8.7	6.8	06/83
47.	BUSINESS & CONSUMER DEBT, GROWTH RATE *	07		9.8	7.1	7.7	8.1	3.8	7.2	7.3	-0.8	06/83
48.	FEDERAL DEBT, GROWTH RATE *	07	2.1	1.1	5.3	3.6	8.0	25.2	13.1	7.5	27.1	06/83
49.	MONEY SUPPLY (M1), GROWTH RATE *	07	3.7	3.3	4.6	2.7	8.3	4.6	7.7	4.5	13.8	07/83
50.	TREASURY BILL RATE *	08	1.1	1.2	2.8	2.3	5.4	5.5	13.4	3.1	9.1	07/83
51.	CORPORATE BOND YIELD *	08	2.7	3.1	4.8	4.8	8.2	9.5	14.5	5.5	12.4	07/83
52.	STOCK PRICE INDEX (S&P 500)	08	18.4	25.2	25.2	8.7	14.8	8.7	11.8	17.0	22.1	07/83

* ACTUAL LEVEL

CHART 1

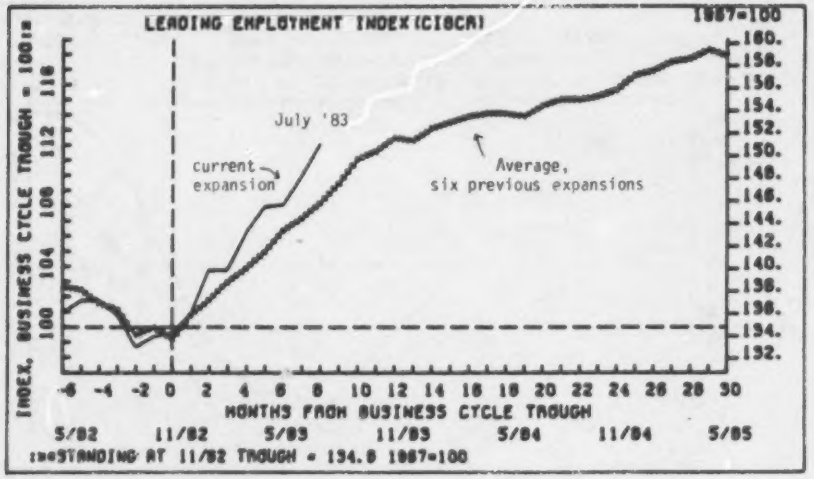

LEADING EMPLOYMENT INDEX (CIBCR)
1987=100
INDEX, BUSINESS CYCLE TROUGH = 100
July '83
current expansion
Average, six previous expansions
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 134.8 1987=100

CHART 2

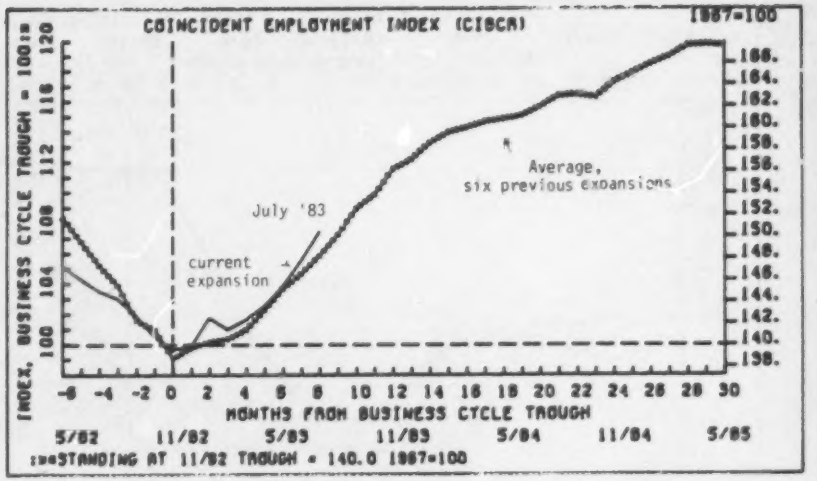

COINCIDENT EMPLOYMENT INDEX (CIBCR)
1987=100
INDEX, BUSINESS CYCLE TROUGH = 100
July '83
current expansion
Average, six previous expansions
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 140.0 1987=100

CHART 3

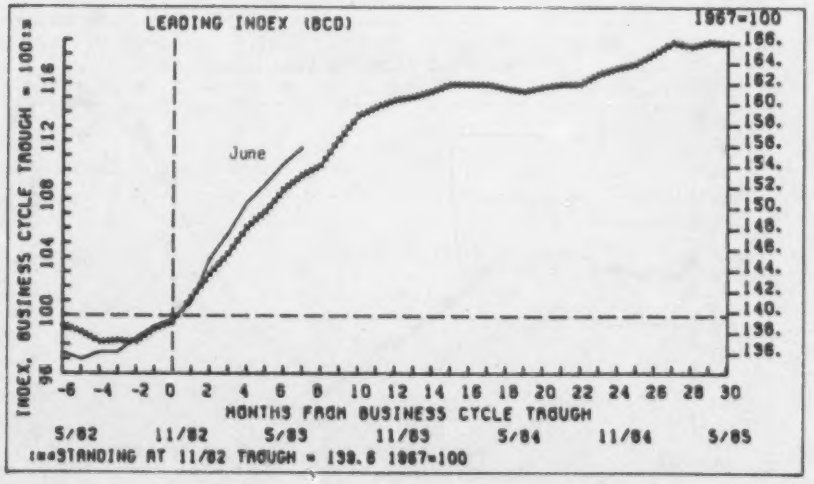

LEADING INDEX (BCD)
1987=100
INDEX, BUSINESS CYCLE TROUGH = 100
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 139.8 1987=100

CHART 4

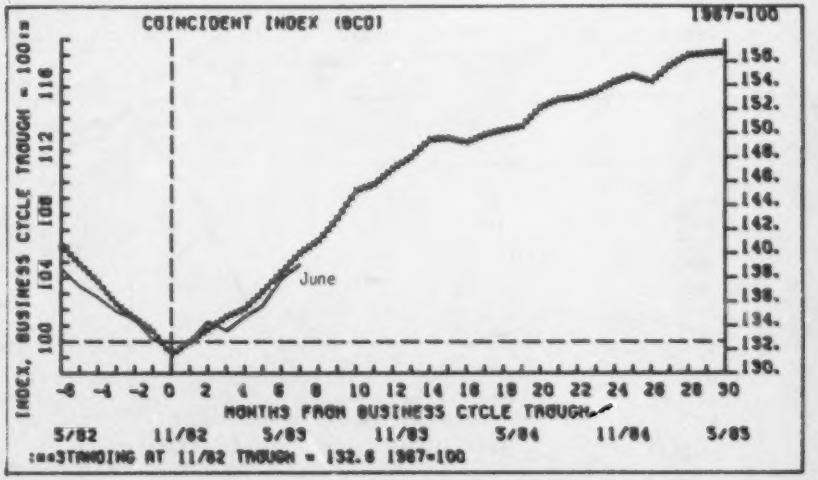

COINCIDENT INDEX (BCD)
1987=100
INDEX, BUSINESS CYCLE TROUGH = 100
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 132.8 1987=100

CHART 5

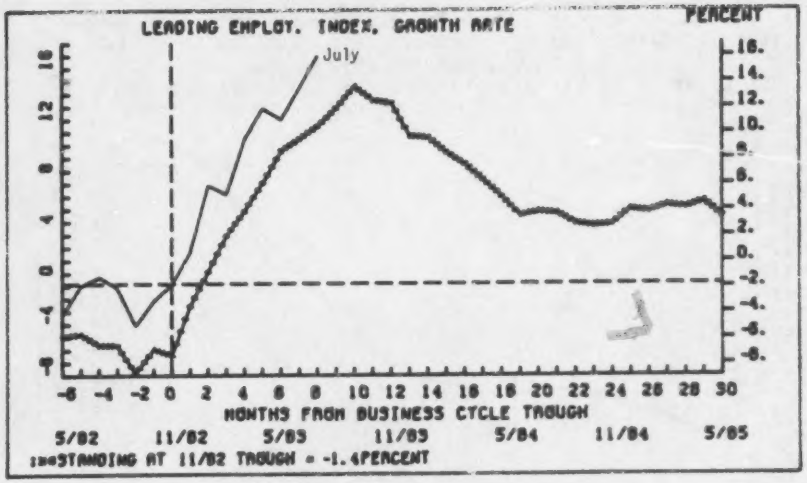

LEADING EMPLOY. INDEX. GROWTH RATE
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = -1.4PERCENT

CHART 6

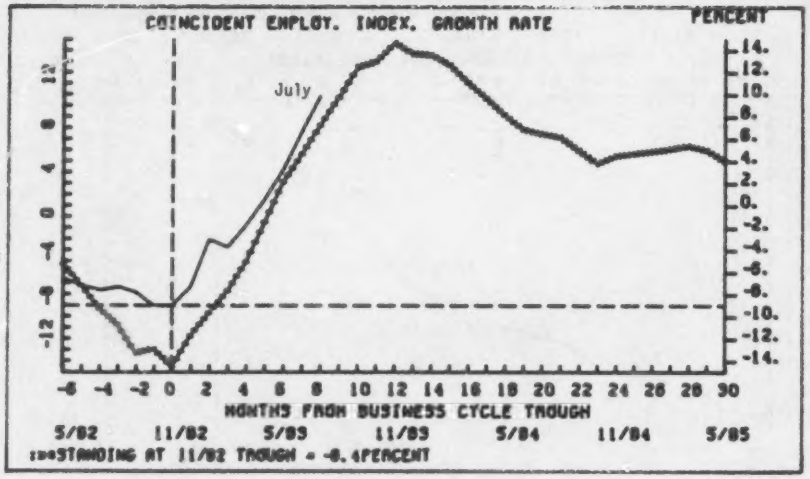

COINCIDENT EMPLOY. INDEX. GROWTH RATE
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = -0.4PERCENT

CHART 7

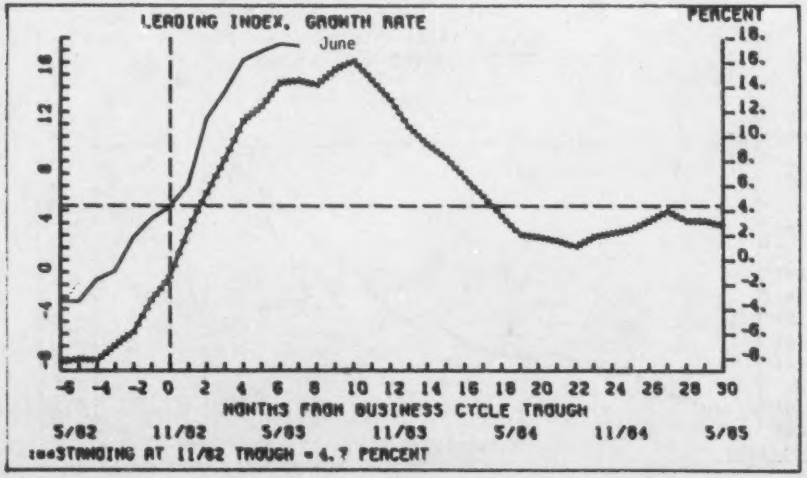

LEADING INDEX. GROWTH RATE
PERCENT
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 4.7 PERCENT

CHART 8

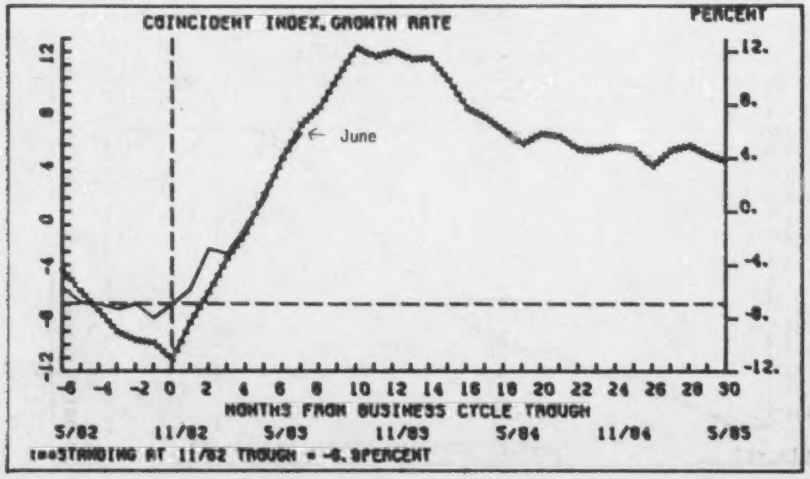

COINCIDENT INDEX. GROWTH RATE
PERCENT
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = -0.9PERCENT

CHART 9

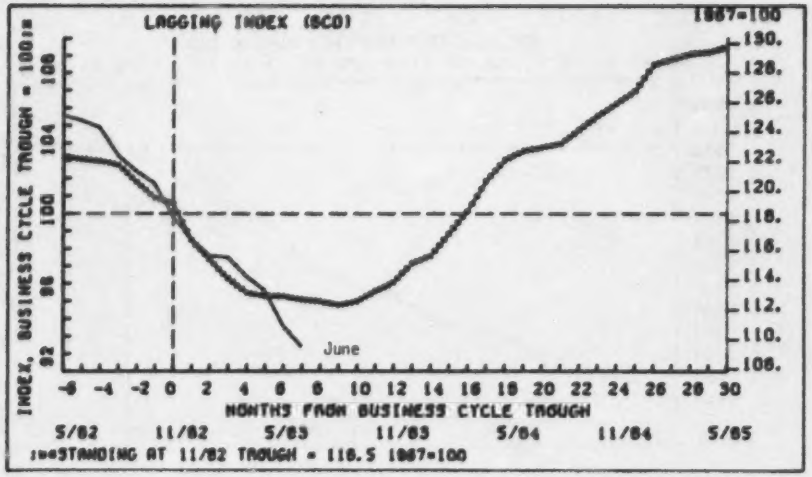

LAGGING INDEX (BCD)
1987=100
INDEX, BUSINESS CYCLE TROUGH = 100
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 118.5 1987=100

CHART 10

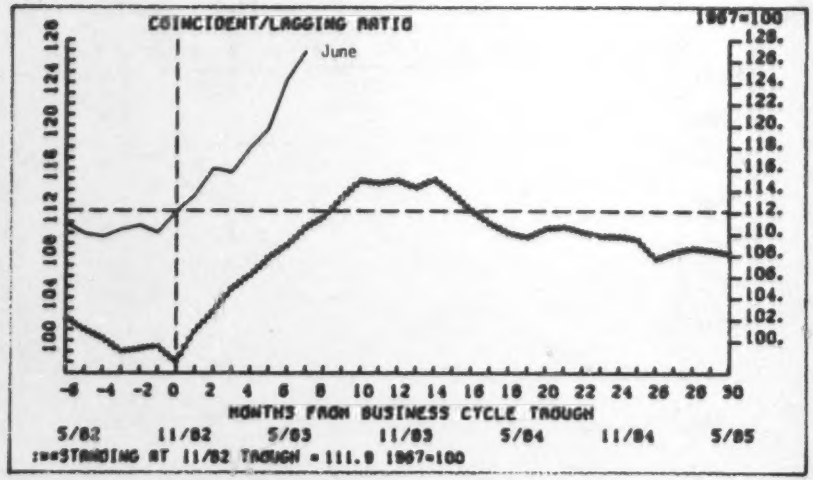


CHART 11

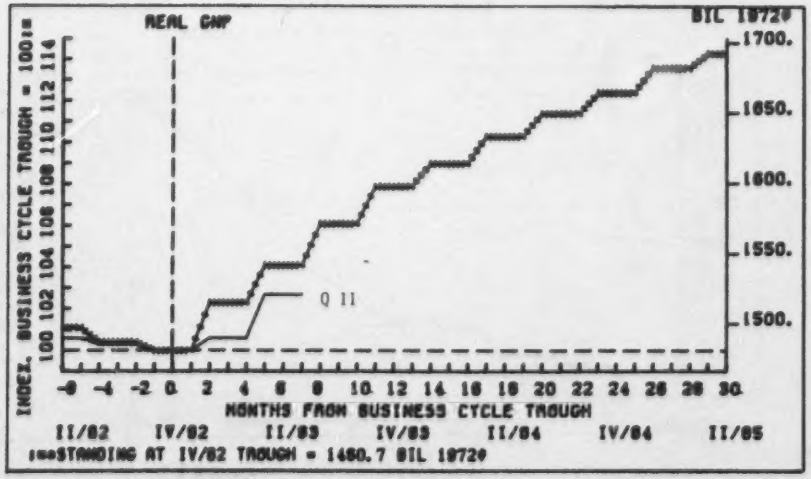

REAL GNP
BIL 1972$
INDEX, BUSINESS CYCLE TROUGH = 100
Q II
MONTHS FROM BUSINESS CYCLE TROUGH
II/82 IV/82 II/83 IV/83 II/84 IV/84 II/85
STANDING AT IV/82 TROUGH = 1460.7 BIL 1972$

CHART 12

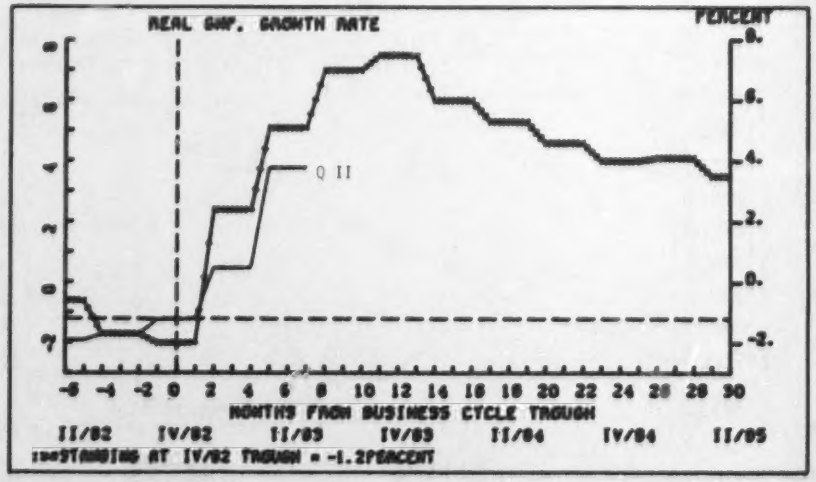

REAL GNP, GROWTH RATE
PERCENT
Q II
MONTHS FROM BUSINESS CYCLE TROUGH
II/82 IV/82 II/83 IV/83 II/84 IV/84 II/85
STANDING AT IV/82 TROUGH = -1.2PERCENT

CHART 13

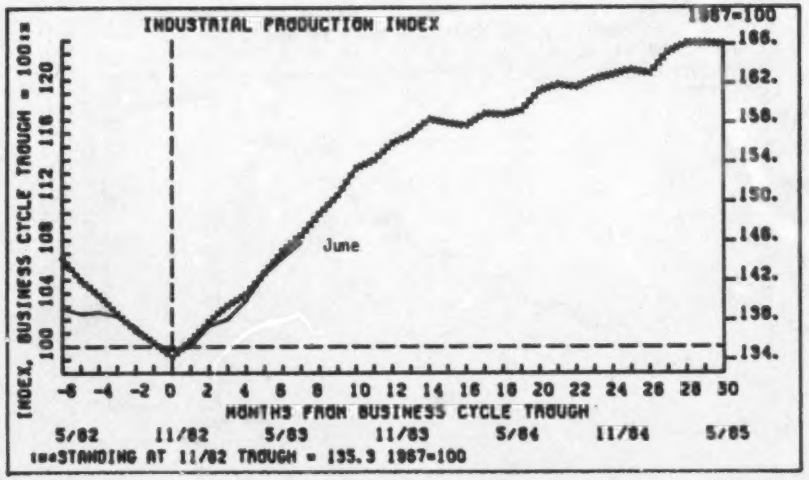


CHART 14

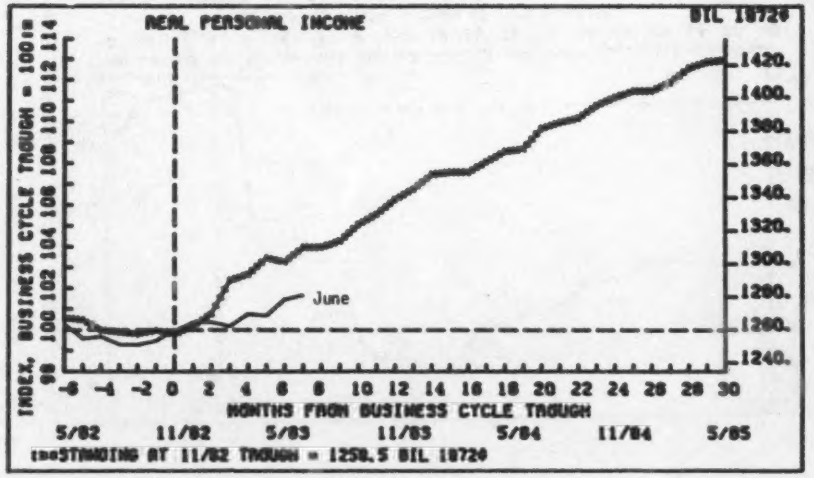


CHART 15

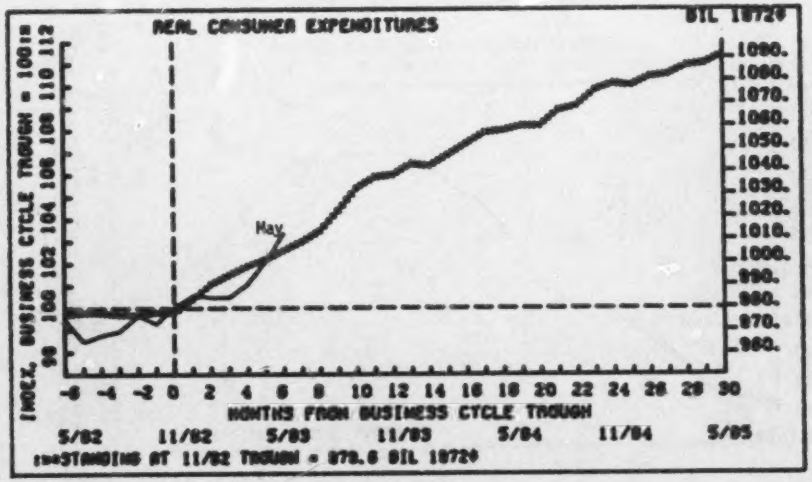


CHART 16

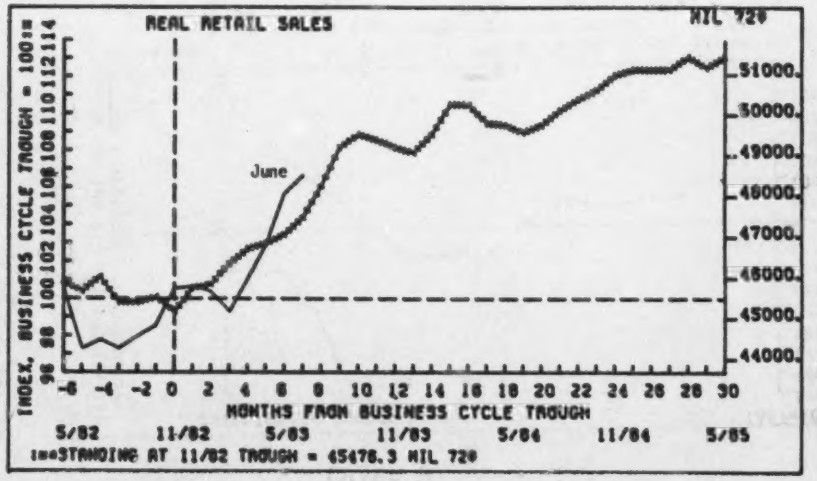


CHART 17

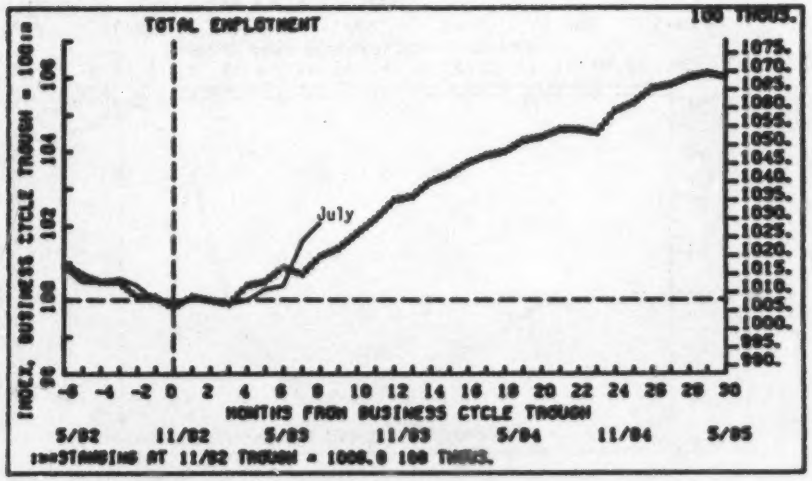


CHART 18

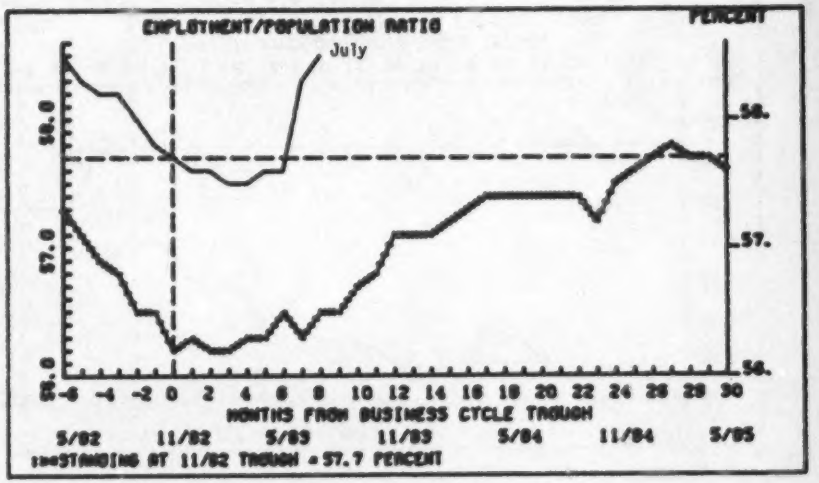


CHART 19

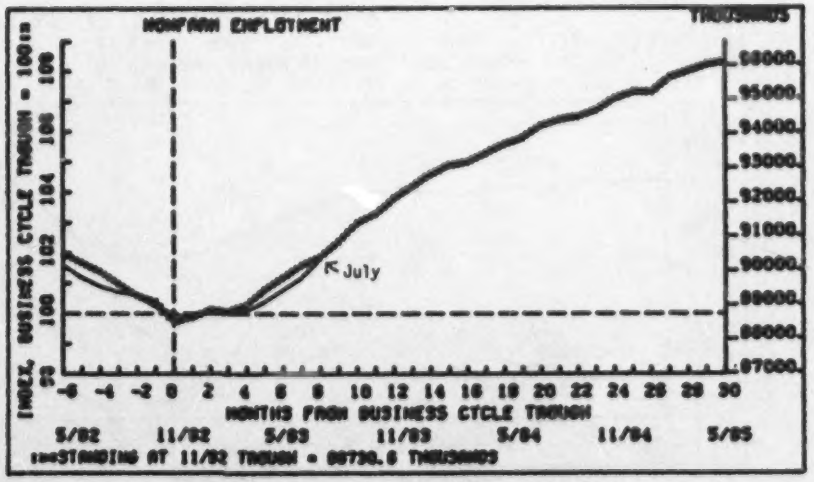

NONFARM EMPLOYMENT
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85

CHART 20

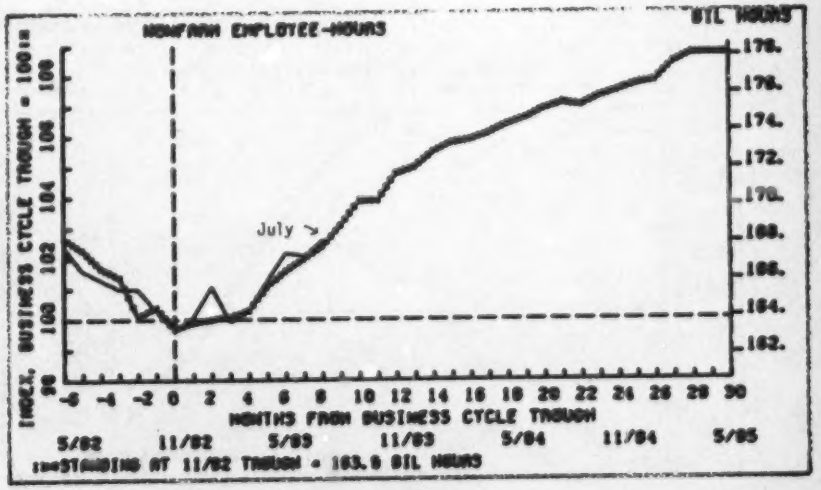


CHART 21

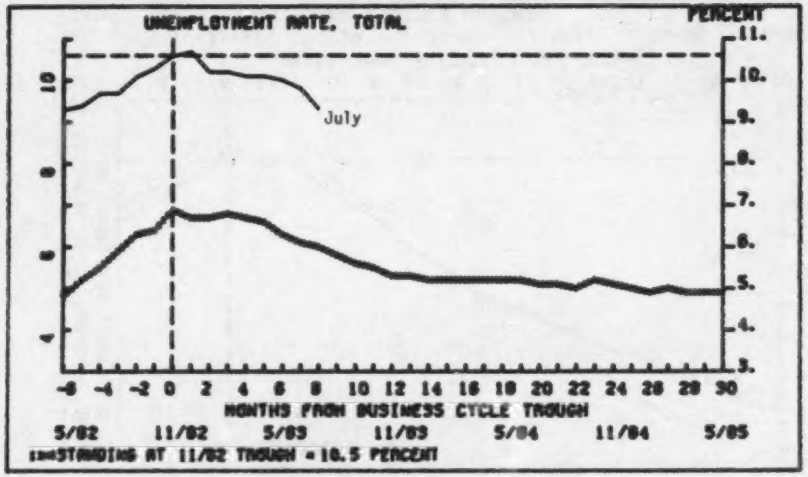

UNEMPLOYMENT RATE, TOTAL
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 10.5 PERCENT

CHART 22

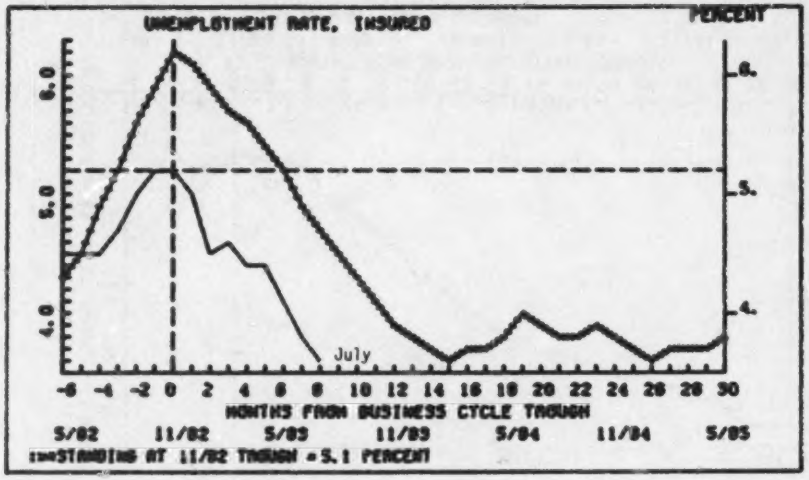

UNEMPLOYMENT RATE, INSURED
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 5.1 PERCENT

CHART 23

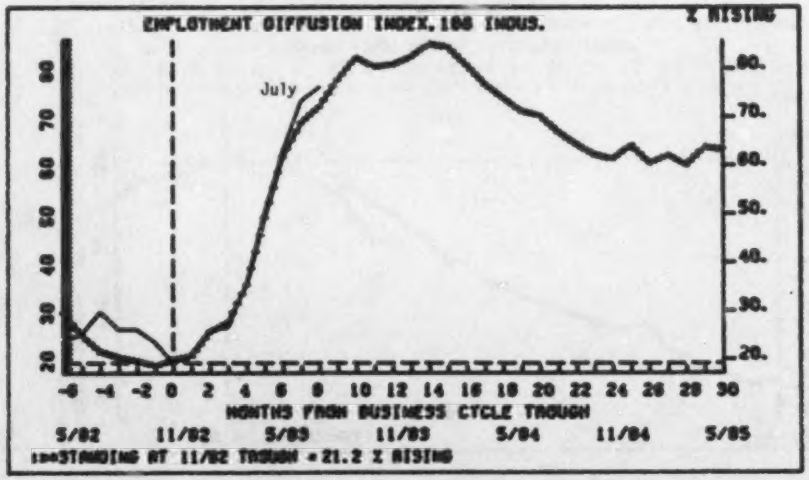

EMPLOYMENT DIFFUSION INDEX, 168 INDUS.
% RISING
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 21.2 % RISING

CHART 24

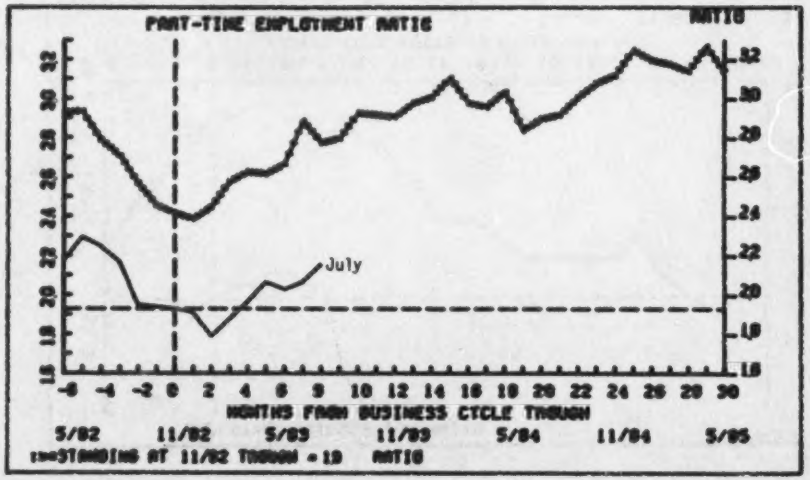

PART-TIME EMPLOYMENT RATIO
RATIO
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 19 RATIO

CHART 25

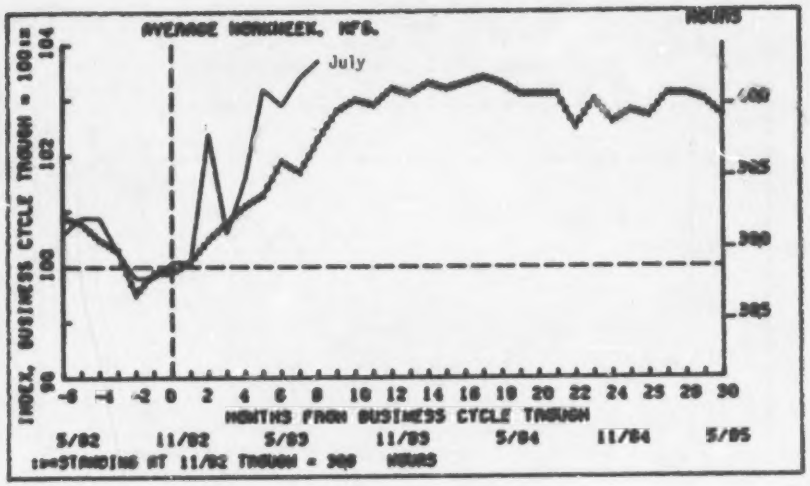


CHART 26

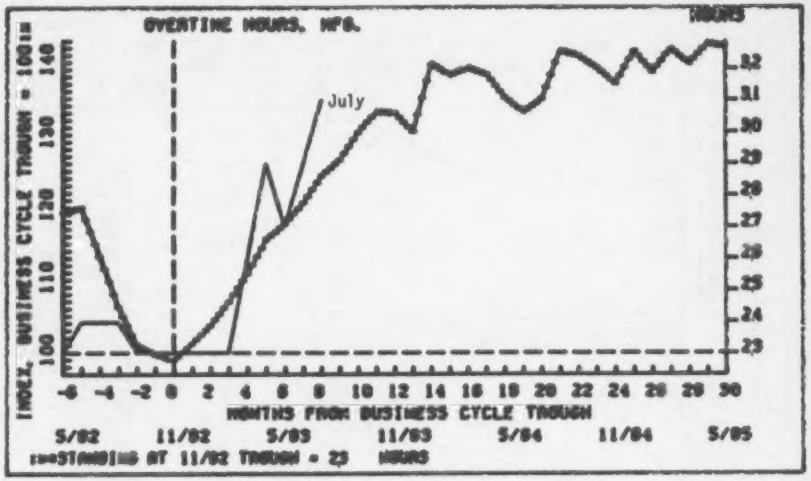


CHART 27

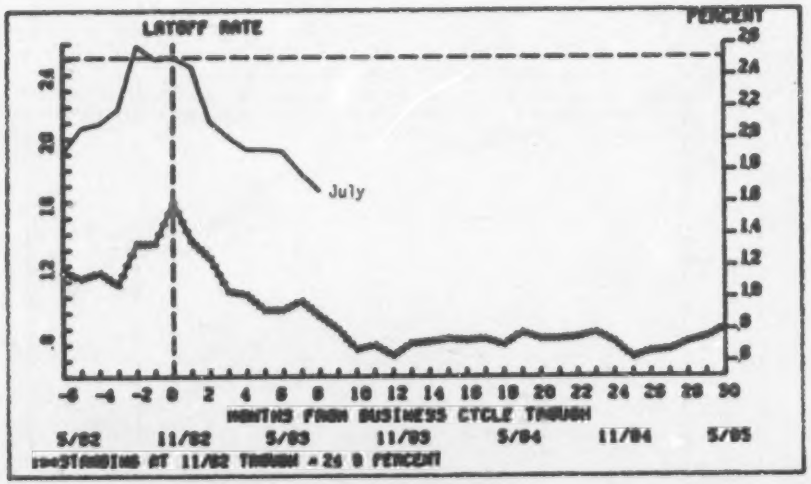


CHART 28

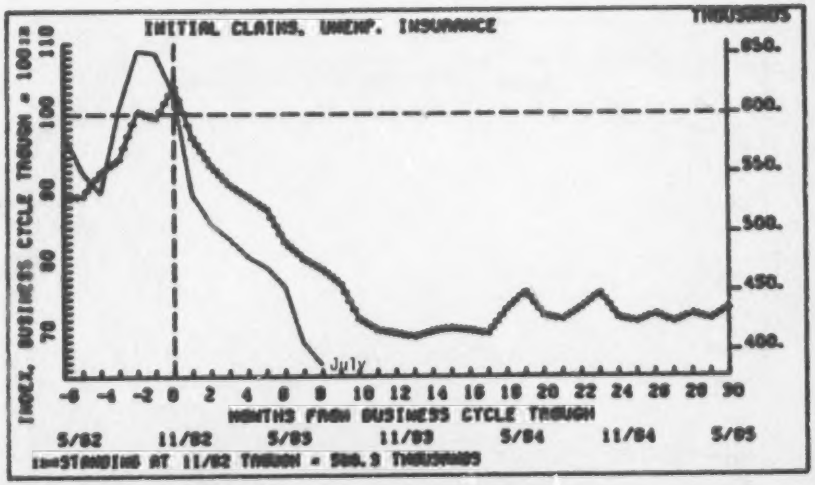


CHART 29

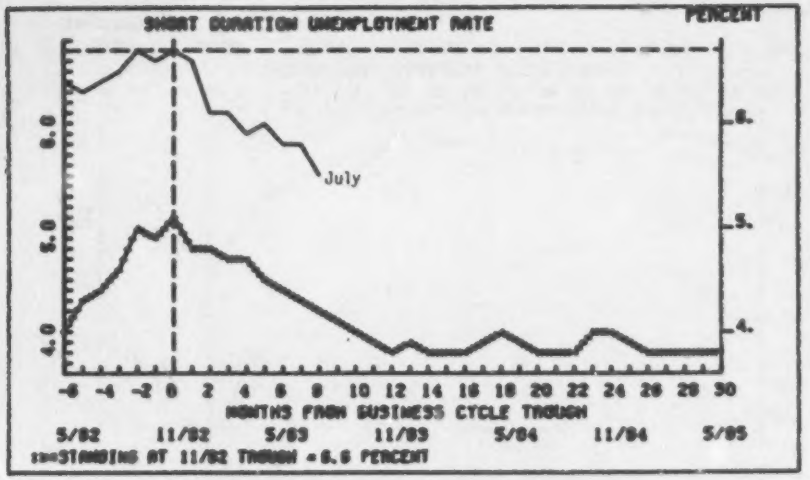


CHART 30

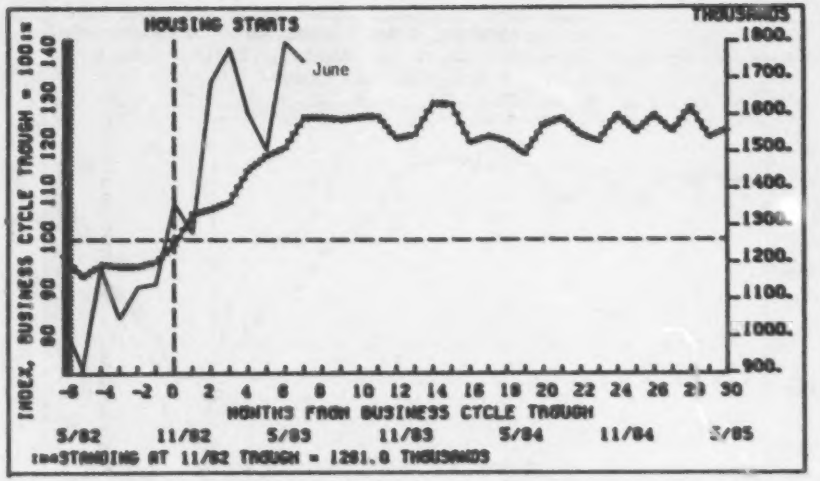


CHART 31

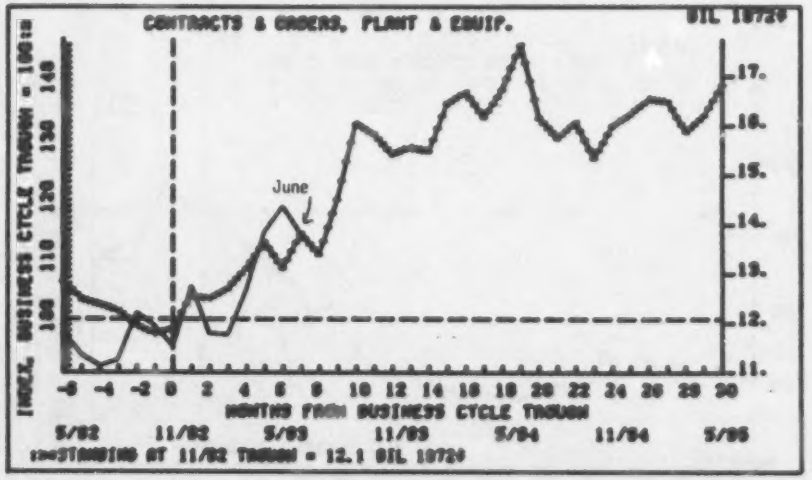


CHART 32

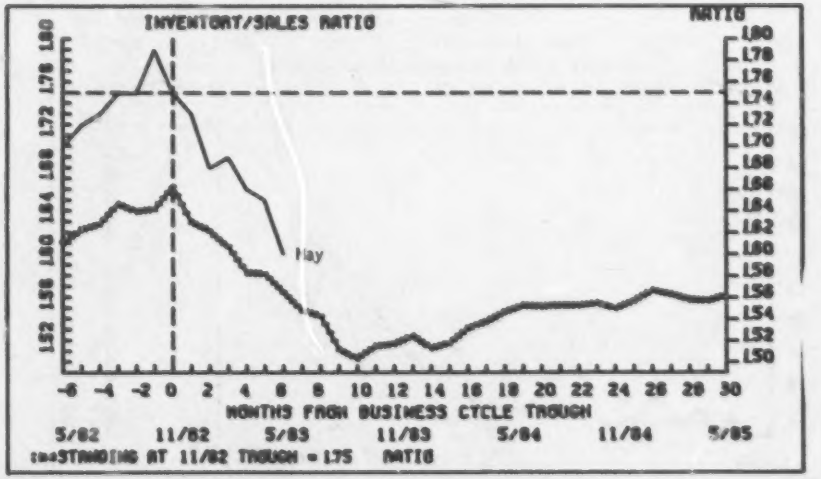


CHART 33

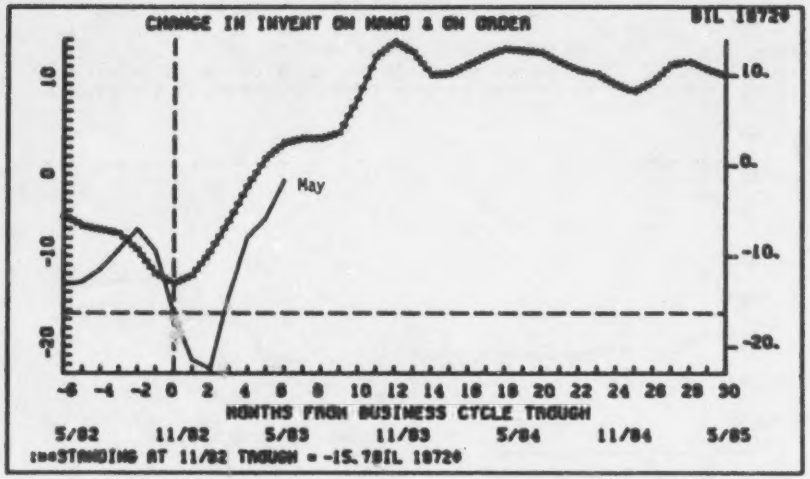

CHANGE IN INVENT ON HAND & ON ORDER
BIL 1972$
10.
0.
-10.
-20.
May
-6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = -15.7BIL 1972$

CHART 34

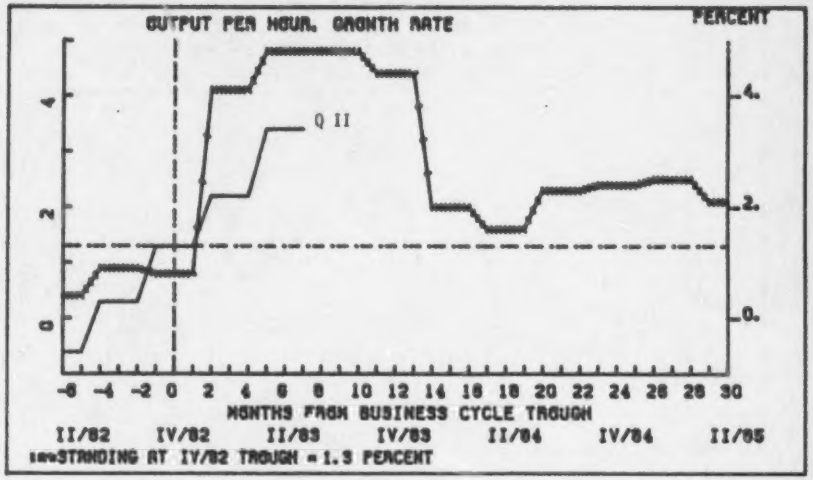

OUTPUT PER HOUR, GROWTH RATE
PERCENT
4.
2.
0.
Q II
-6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
MONTHS FROM BUSINESS CYCLE TROUGH
II/82 IV/82 II/83 IV/83 II/84 IV/84 II/85
STANDING AT IV/82 TROUGH = 1.3 PERCENT

CHART 35

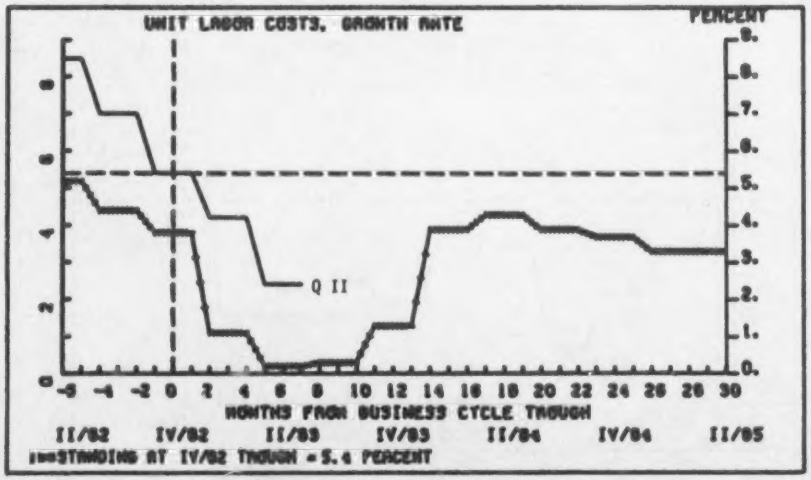


CHART 36

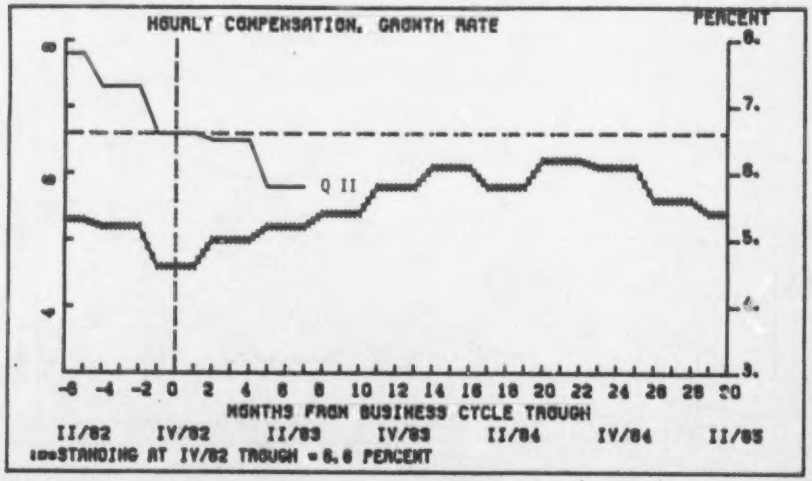


CHART 37

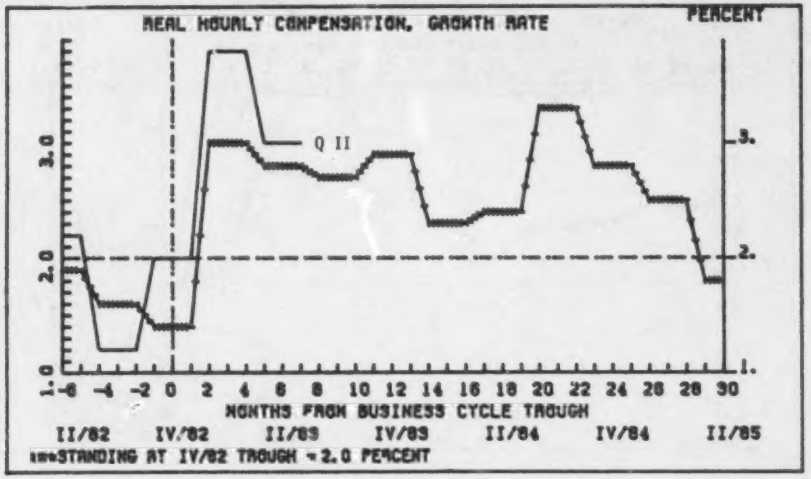

REAL HOURLY COMPENSATION, GROWTH RATE
PERCENT
Q II
3.0
2.0
1.0
3.
2.
1.
-6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
MONTHS FROM BUSINESS CYCLE TROUGH
II/82 IV/82 II/83 IV/83 II/84 IV/84 II/85
1==STANDING AT IV/82 TROUGH = 2.0 PERCENT

CHART 38

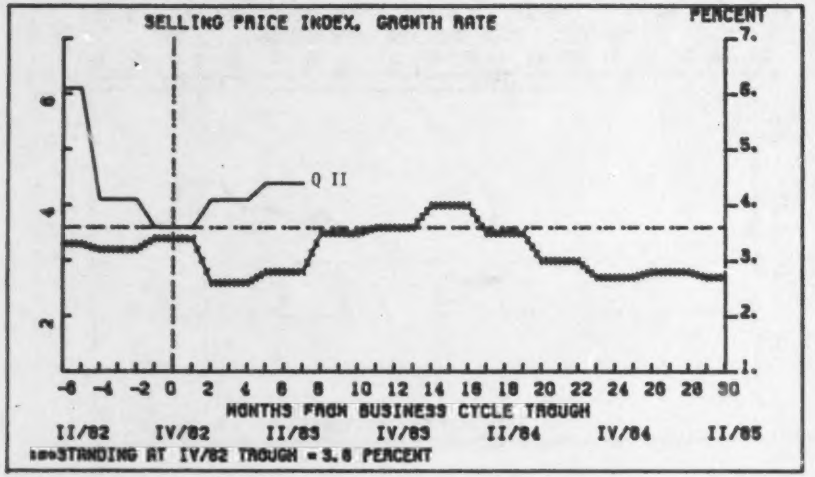


CHART 39

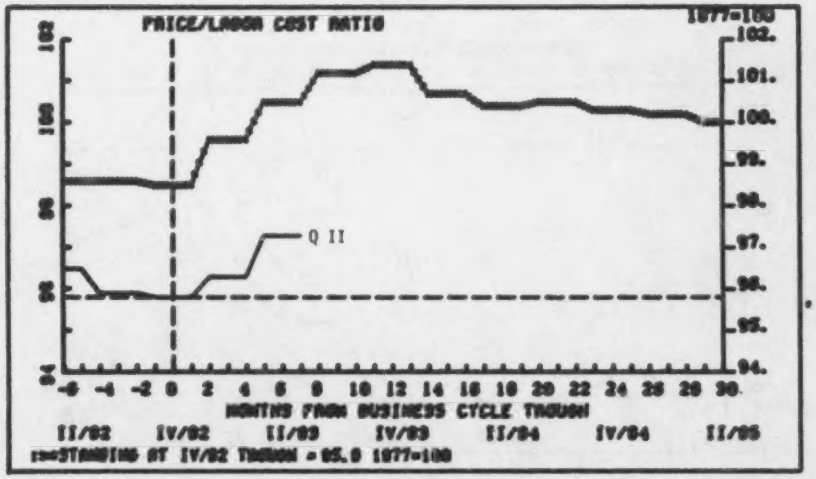


CHART 40

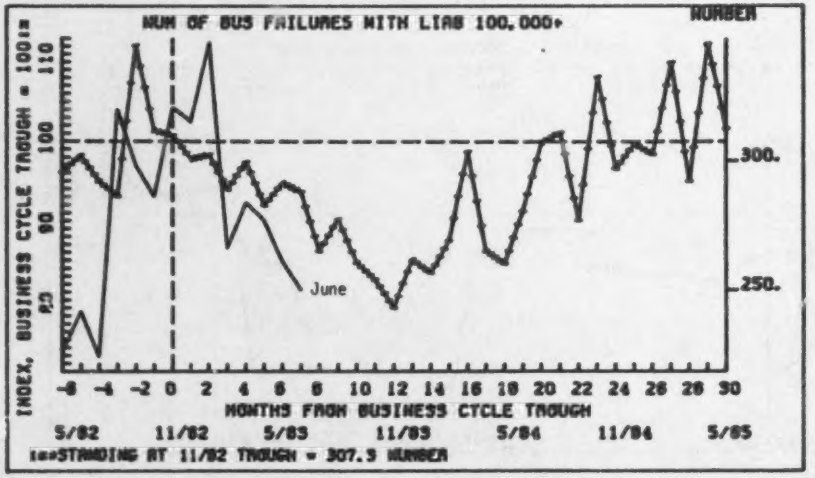

NUM OF BUS FAILURES WITH LIAB 100,000+
NUMBER
INDEX, BUSINESS CYCLE TROUGH = 100
June
300.
250.
-6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
1==STANDING AT 11/82 TROUGH = 307.3 NUMBER

CHART 41

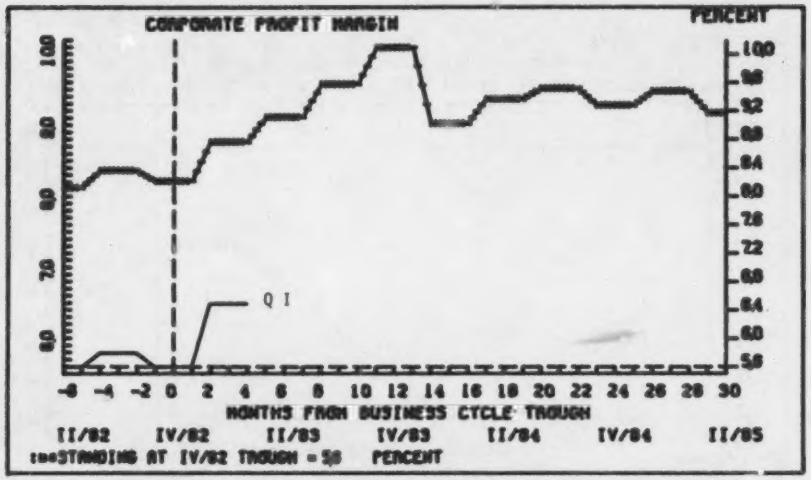

CORPORATE PROFIT MARGIN
PERCENT
Q I
MONTHS FROM BUSINESS CYCLE TROUGH
II/82 IV/82 II/83 IV/83 II/84 IV/84 II/85
STANDING AT IV/82 TROUGH = 5.8 PERCENT

CHART 42

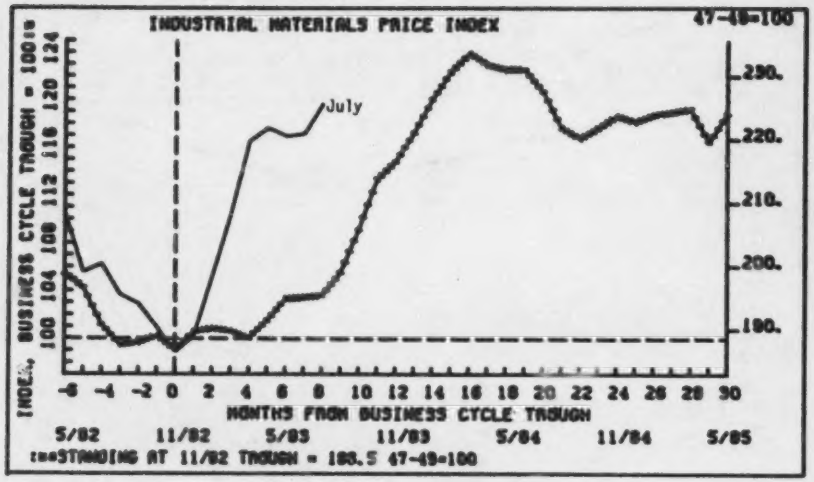

INDUSTRIAL MATERIALS PRICE INDEX
47-49=100
July
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 188.5 47-49=100

CHART 43

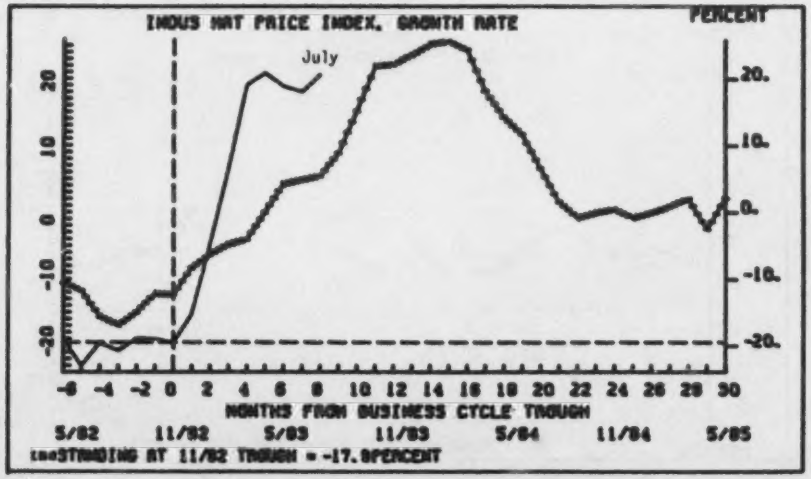

INDUS MAT PRICE INDEX, GROWTH RATE
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = -17.8PERCENT

CHART 44

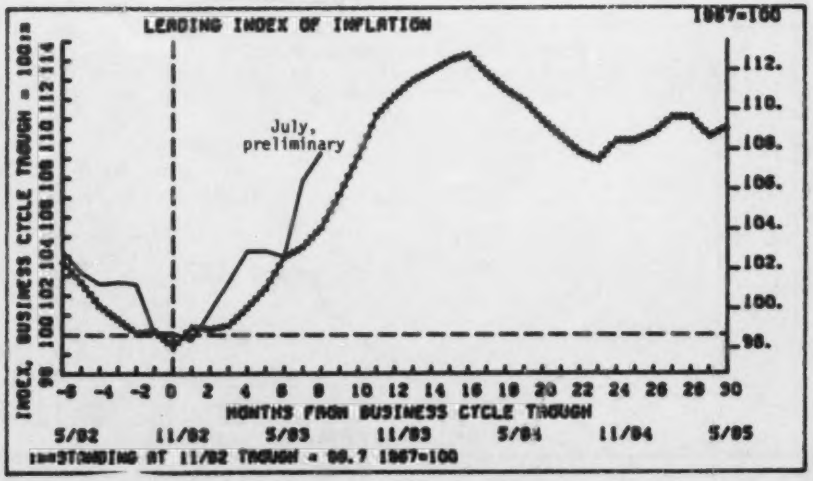

LEADING INDEX OF INFLATION
1967=100
July,
preliminary
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 98.7 1967=100

CHART 45

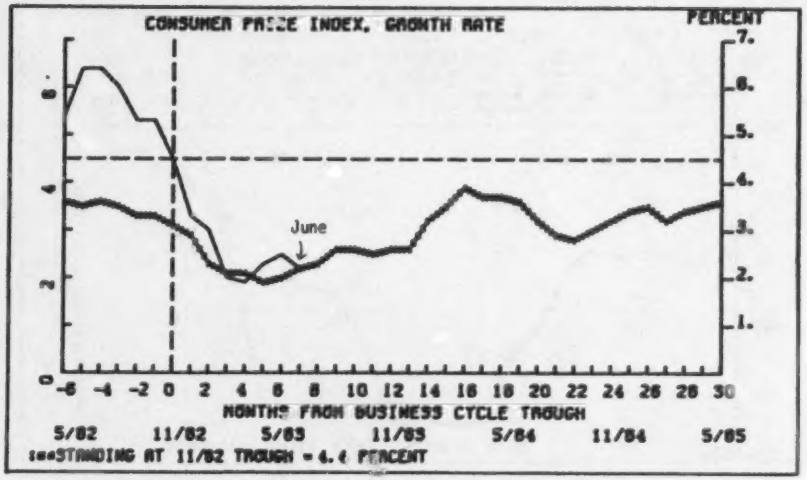

CONSUMER PRICE INDEX, GROWTH RATE
PERCENT
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 4.4 PERCENT

CHART 46

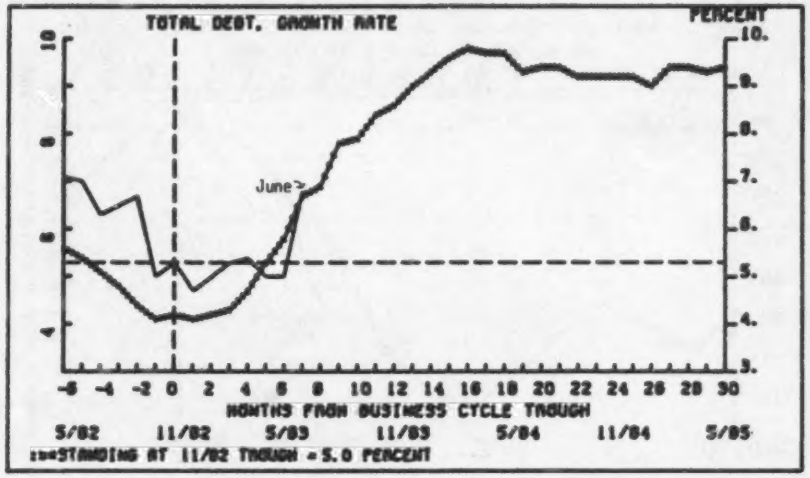

TOTAL DEBT, GROWTH RATE
PERCENT
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 5.0 PERCENT

CHART 47

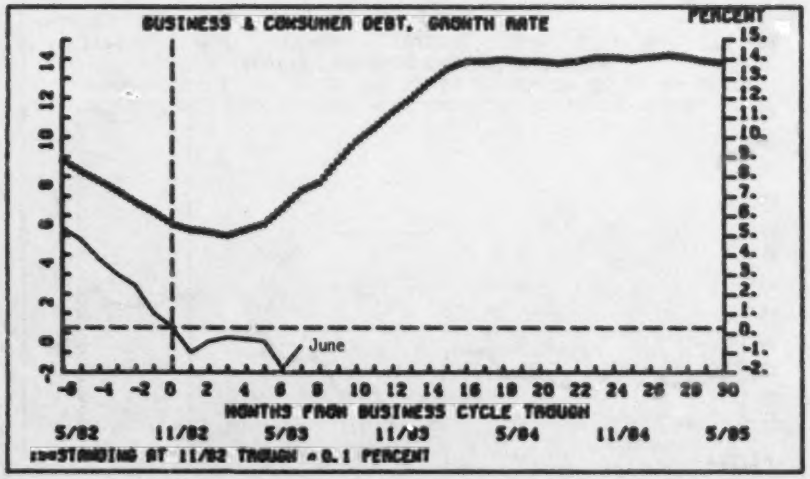

BUSINESS & CONSUMER DEBT, GROWTH RATE
PERCENT
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 0.1 PERCENT

CHART 48

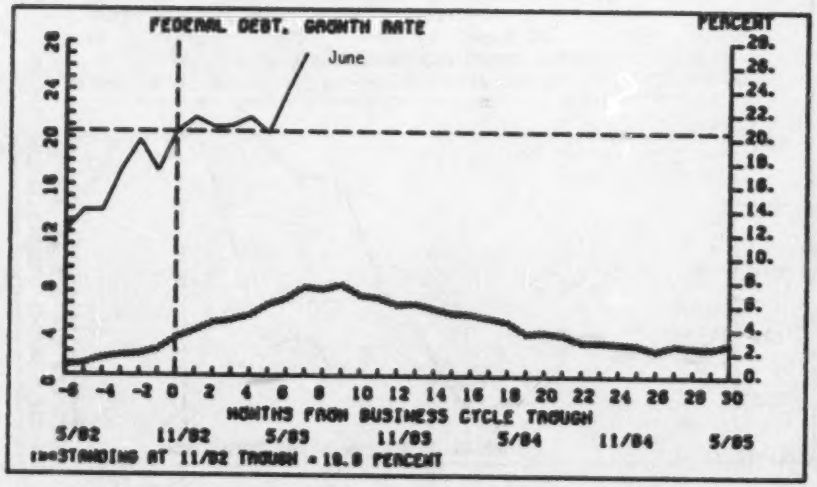

FEDERAL DEBT, GROWTH RATE
PERCENT
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 18.8 PERCENT

CHART 49

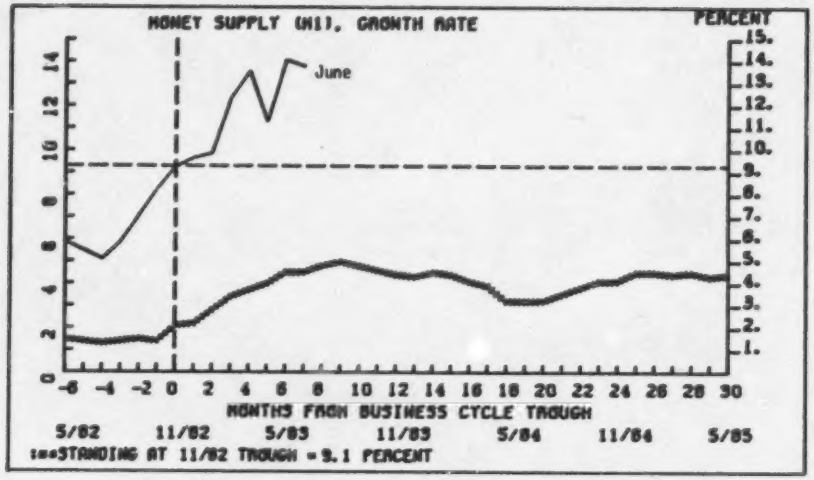

MONEY SUPPLY (M1), GROWTH RATE
PERCENT
June
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 9.1 PERCENT

CHART 50

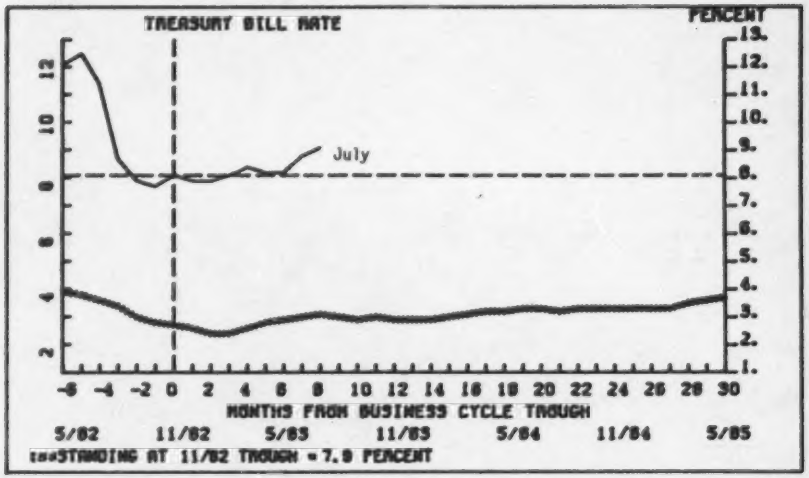

TREASURY BILL RATE
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 7.9 PERCENT

CHART 51

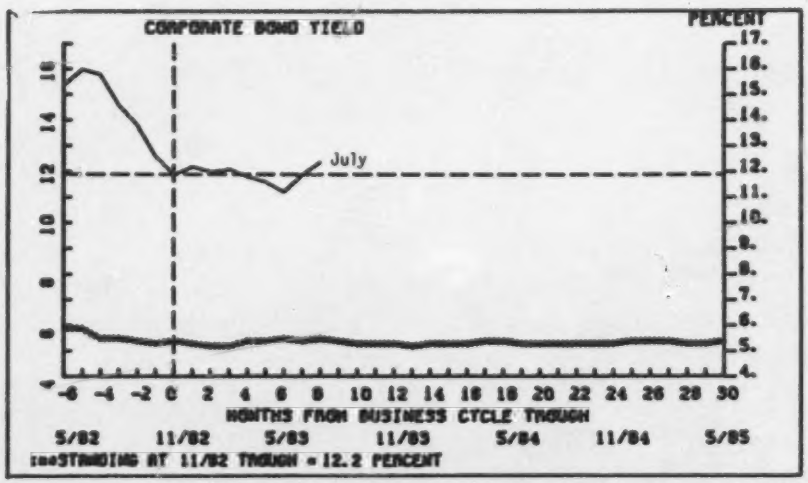
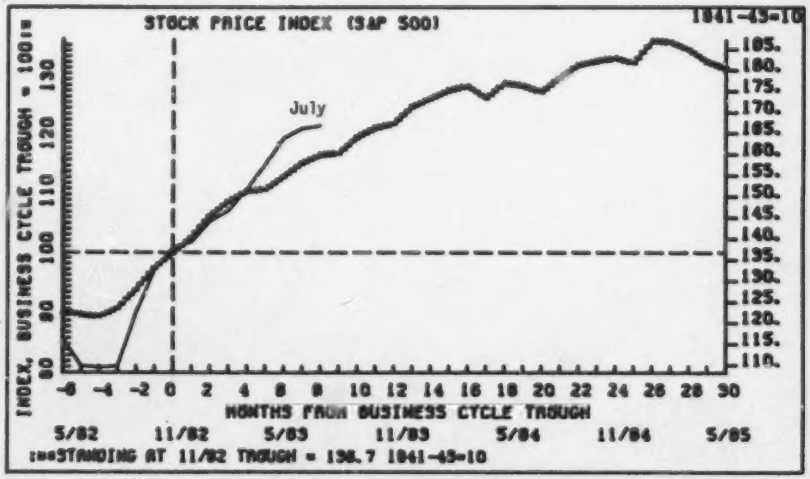

CORPORATE BOND YIELD
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 12.2 PERCENT

CHART 52


STOCK PRICE INDEX (S&P 500)
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 138.7

ABOUT THE CENTER FOR INTERNATIONAL BUSINESS CYCLE RESEARCH

The Columbia Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on domestic U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the six other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
808 Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the later stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisions contained in this report help one anticipate what is typical and distinguish it from the unusual.

Other CIBCR publications include International Economic Indicators, a monthly sixty page data compilation on the seven major industrial countries, and Inflation Watch, a bimonthly report designed to promote an understanding of inflation, prepared in collaboration with the American Enterprise Institute. Address all correspondence concerning subscriptions to the Center for International Business Cycle Research, 808 Uris Hall, Columbia University, New York, NY 10027

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RECESSION - RECOVERY WATCH...

**A Bimonthly Report
Designed to Assist in the Evaluation
of Current Business Conditions**

Published by the Center for International Business Cycle Research,
Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 5, No. 4
October 1983

SUMMARY

The economy has continued to track closely the average path of previous recoveries, onward and upward. In one important sense, however, the recovery has already ended. Total output and employment have regained the peak levels from which they fell when the recession started in 1981. Now on new high ground, the pace of advance is apt to be slower than the 6½% annual GNP growth rate achieved to date. Most business cycle expansions have lasted from three to five years, with an average growth rate in the 4 to 5 percent range. A new weekly leading index attests to the prospect of slower growth ahead. Leading indexes for other industrial countries have begun to buttress the U.S. expansion. Holding the line on inflation is becoming more difficult as pressures for higher costs and prices build.

Recovery Over; New Growth Phase Begins

Although the word "recovery" has not yet left our vocabulary, it is rapidly becoming obsolete. The most comprehensive measures of aggregate economic activity, real GNP and total employment, have already recovered their peak levels prior to the recession and reached all-time highs in the third quarter. The leading indexes did so as long ago as last spring, anticipating the end of the recovery just as they anticipated its beginning. Not every measure of activity, of course, has reached new high ground. Industrial production was still a trifle short of a new high in September, and so was the number of employed on nonfarm payrolls. But total personal income, total retail sales, and total manufacturing and trade sales, all expressed in real terms, are well above their 1981 highs.

Measures of activity that allow for growth in the population or in the labor force take longer to post new records after a recession, and may not do so at all unless the expansion is exceptionally vigorous and prolonged. None of the three expansions since 1970 reduced the unemployment rate to the 3.4 percent level that it reached in 1969, even though each of them pushed total output, income, and employment to new high levels. The 9.1% unemployment rate in September was not only far above its 1969 level but also well above the 7 percent level that prevailed in 1981 when the last recession started. By this measure, then, the recovery is only about half over.

In terms of the percentage of the working-age population that is employed, the September figure, 58.8 percent, is also below its all-time high of 60.5 percent in December 1979. This percentage, too, is still some distance below its level when the

recession started (59.6 in July 1981). Unlike the unemployment rate, however, the percentage employed is higher now than at the peaks of the expansions of 1969 and 1973. Looking at the percentage employed, the economy seems to be in fairly good shape; looking at the percentage unemployed it seems in poor shape. In this respect the insured unemployment rate, at 3.4 percent in September, is more consistent with the employment percentage than with the total unemployment rate. Its 1981 low was 3.2 percent and its 1979 low was 2.7 percent. In view of these inconsistencies it would be well not to rely solely, as most commentators do, on the total unemployment rate as the criterion of how far the economy is from "full employment."

In any case, if we use the absolute level of output, real income, and employment as the criterion, the "recovery" phase ended in July or August 1983 and a new growth phase has begun. The period of "depressed activity" lasted almost precisely two years, from July 1981 to July or August 1983. This is in line with previous experiences with sharp recessions. In the 1973-75 recession the recovery date was reached in the spring of 1976, somewhat more than two years after the business cycle peak of November 1973. Both in depth and in the duration of the period of depressed activity, the 1973-75 recession exceeded the 1981-82 recession.

It would also be in line with previous experience if the new growth phase proceeded at a less rapid pace than the recovery phase. As presently estimated by the Commerce Department, the rate of growth in real GNP from IV 1982 to III 1983, was 6.7% at annual rate. Once previous levels of output have been reached, and the stimulus of inventory replenishment has subsided, bottlenecks are more likely to appear in labor or capital markets, slowing the growth process. The average pattern is shown in Chart 12, which suggests that growth rates of 4 to 6 percent will be more typical from here on through 1984.

Measures of Expansion

In considering the outlook for further expansion a look at the record of past expansions, from business cycle trough to peak, may be helpful. The longest record available covers nearly 150 years, from 1834 to 1981, and shows that the average duration of the thirty-five expansions was 32 months. Since the 1930's, however, expansions have been longer: the ten expansions from 1932 to 1981 posted an average duration of 49 months. Six of the ten expansions fell within a range of three to five years, two have been shorter and two longer.

Some details on the length, vigor and diffusion of the seven expansions since 1949 are given in Table A. During these expansions real GNP rose at annual rates ranging from 3.5 to 6.4 percent per year, and averaging 4.7 percent. The unemploymnet rate declined 2.7 percent points, on average. The typical expansion, at its widest scope, embraced about ninety percent of the nonfarm industries in the economy. The current expansion is approaching that level of diffusion with 81 percent of the 186 industries reporting a rising level of employment during the six months ending in September.

A New Weekly Leading Index

A leading index that has the attributes of others of its kind but is available weekly will shortly make its debut in Business Week. Designed and constructed by the Center for International Business Cycle Research, the Business Week index has turned down prior to every recession since 1948 and turned up before every recovery. The average lead was 10 months at peaks and 5 months at troughs, a record that compares well with the Commerce Department's leading index (BCD). The chief advantages of the new index are that it includes some new indicators and that it is more up-to-date. At any given time the weekly index will cover three to six weeks more recent data than the BCD index. Although weekly figures are more erratic than monthly, four-week moving averages can be used to make them equally smooth without losing the advantage of timeliness.

Chart A shows how the weekly index (converted to monthly averages) has performed in the current recovery as well as in past recoveries. It advanced rapidly until March, more

TABLE A. MEASURES OF THE DURATION, VIGOR AND DIFFUSION OF EXPANSIONS

Business Cycle Trough Business Cycle Peak	Oct. 1949 July 1953	May 1954 Aug. 1957	Apr. 1958 Apr. 1960	Feb. 1961 Dec. 1969	Nov. 1970 Nov. 1973	Mar. 1975 Jan. 1980	July 1980 July 1981	Average, Seven Expansions
Duration (months)								
Business Cycle	45	39	24	106	36	58	12	46
GNP, current dollars	42	39	30	a	a	a	a	n.a.
GNP, constant dollars	48	39	24	105	45	60	15	48
Industrial Production	45	35	21	104	43	48	12	44
Nonfarm employment	44	31	23	109	47	59	12	46
Increase (percent)[b]								
GNP, current dollars	43.8	24.0	16.3	a	a	a	a	n.a.
GNP, constant dollars	28.1	13.2	11.3	49.2	17.1	24.3	4.4	21.1
Industrial Production	50.1	23.7	26.0	78.9	25.9	37.4	9.6	35.9
Nonfarm employment	17.7	9.1	7.5	33.7	11.9	19.1	1.9	14.4
Unemployment Rate								
Minimum	2.5	3.6	4.9	3.3	4.5	5.5	7.1	4.5
Decrease	-5.3	-2.3	-2.4	-3.6	-1.4	-3.3	-0.6	-2.7
Rate of Increase (percent per year)								
GNP, current dollars	10.9	6.9	6.2	a	a	a	a	n.a.
GNP, constant dollars	6.4	3.9	5.5	4.7	4.3	4.4	3.5	4.7
Industrial Production	11.4	7.6	14.1	6.9	6.6	8.3	9.6	9.2
Nonfarm employment	4.5	3.4	3.8	3.2	2.9	3.6	1.9	3.3
Diffusion (percent)								
Nonfarm industries, maximum percentage with rising employment, with date when maximum was reached[c]	100 July 1950	95 May 1955	92 Jan. 1959	91 Dec. 1965	86 Mar. 1972	85 Feb. 1977	73 Oct. 1980	89

[a] No cycle.

[b] Percentage change from trough month or quarter in the series to the peak month or quarter, over the intervals shown. For the unemployment rate the minimum figure is the lowest for any month during the expansion, and the decreases are from the highest month to the lowest, in percentage points.

[c] Based on changes in employment over six month spans, centered on the fourth month of the span, in 30 nonagricultural industries, 1948-59; 172 industries, 1960-71; 186 industries, 1972-80.

Source: U.S. Department of Commerce, U.S. Department of Labor, Board of Governors of the Federal Reserve System, National Bureau of Economic Research.

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slowly since then. Through September, it has risen almost exactly as much as in the previous six recoveries.

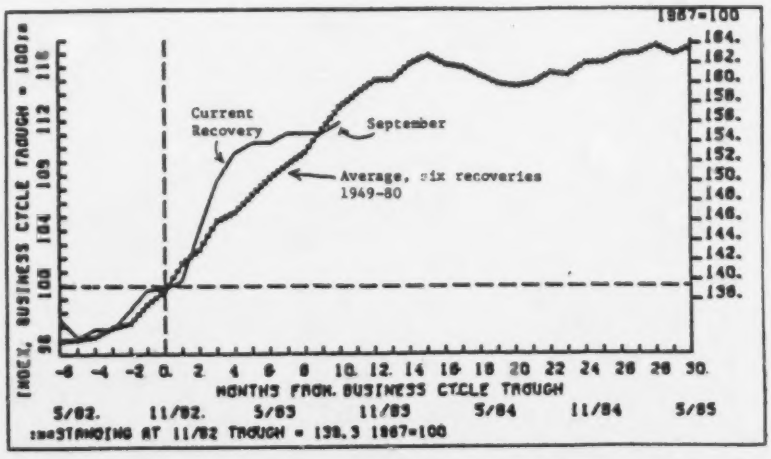
The index includes seven components representing the five major types of economic process that produce leading indicators, as follows:

Process	Indicators
1. Marginal employment adjustments	Initial claims for unemployment insurance (inverted)
2. Capital investment commitments	Rate of change, real estate loans, commercial banks
3. Inventory investment and purchasing	Rate of change, industrial materials price index
4. Profitability	Number of large business failures (inverted)
	Stock price index, 500 common
5. Money and financial flows	Rate of change, broad money supply (M2)
	Corporate bond yields (inverted)

Each of the series has a good record as a leading indicator and an underlying rationale supporting this behavior. The seven series are given equal weight in the index, after adjustment for differences in their average amplitude of fluctuation. The index methodology is the same as in the BCD index. All series are adjusted for seasonal variations where required. Rates of change are computed by the weekly equivalent of our six-month smoothed procedure, using the ratio of the current weekly figure to the preceeding 52-week average.

Weekly estimates of M2 are prepared by combining the seven components that are published weekly with estimates for the remaining three components. The method appears to yield reasonably accurate estimates of M2 for the month ahead, as subsequently published by the Federal Reserve.

Chart A. RECOVERY PATTERN, BUSINESS WEEK LEADING INDEX



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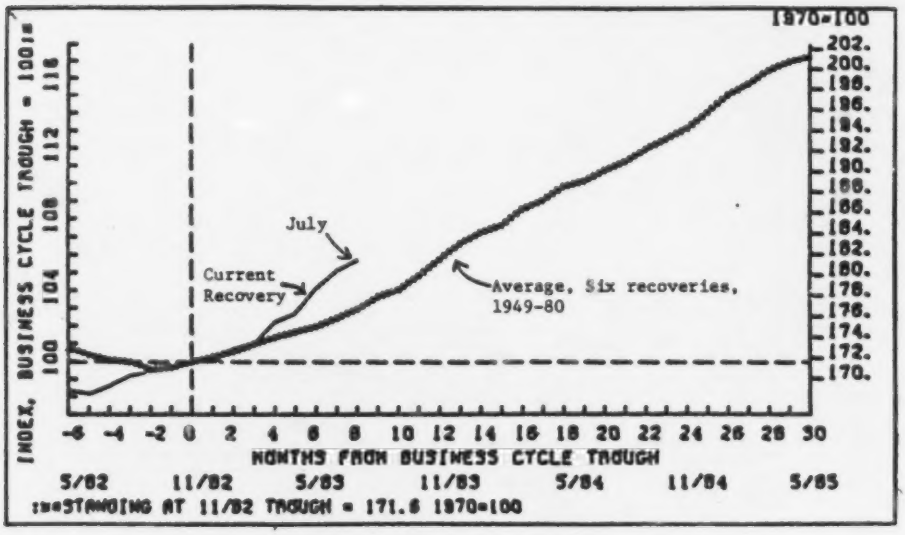
Recovery Spreading Abroad

The leading indexes compiled by CIBCR for the six major industrial countries outside the U.S. are climbing -- rapidly in some countries, more slowly in others. In this respect, the recovery has become an international recovery, a factor that will add to its power and sustainability. Previous U.S. recoveries have been similarly reinforced (see Chart B). The chart shows the average pattern during U.S. recovery periods of the composite leading index for Canada, the U.K., West Germany, France, Italy and Japan. On average, the index rose steadily during the first thirty months of these recoveries. The current upswing in the index, through the first eight months of the U.S. recovery, has been considerably more rapid than the average. Since export volume has generally followed the leading indexes, the prospects for U.S. sales abroad appear to be brightening.

Chart B
AVERAGE PATTERN DURING CURRENT AND PREVIOUS
U.S. RECOVERIES: LEADING INDEX FOR SIX COUNTRIES 1/



1/ Canada, United Kingdom, West Germany, France, Italy and Japan.

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Another Recovery Underway -- Inflation

The CIBCR Leading Index of Inflation moved up again in August and September, continuing a climb that began in December. The CPI inflation rate (six-month smoothed) began to climb in March from a low of 1.8 percent, and reached 3.8 percent in September. A resurgence of inflationary pressures is typical of business cycle recoveries. But the extent of the rise in the leading index is well beyond the average, and this suggests

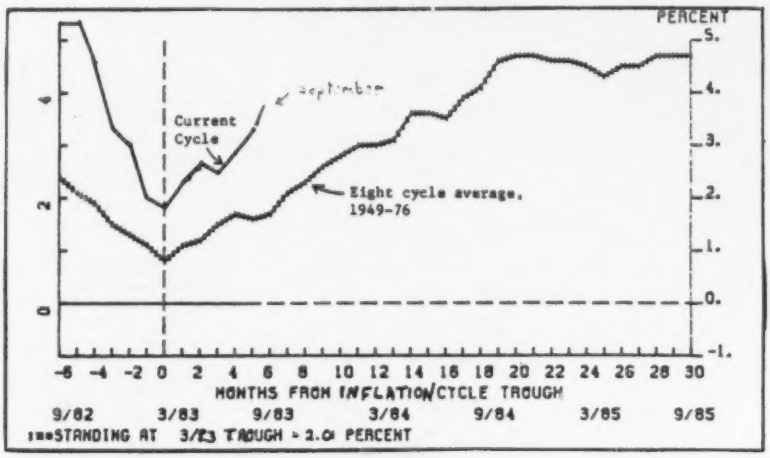
that the CPI will accelerate further. This in turn means that the inflation rate has probably embarked on an upswing that will be of sufficient size and duration to warrant its inclusion in our chronology of inflation cycles.

This chronology identifies eight inflation cycles between 1949 and 1983, two more than the number of business cycles. Although downswings in inflation have occurred during every recession, in two instances (1951-52 and 1966-67) inflation declined when the economy merely slowed down. In any case, it is useful to know how the current upswing in inflation compares with previous upswings, as shown in Chart C, top panel. The disquieting news is that the six-month upswing since March is substantially larger than the average rise in the CPI inflation rate during the first six months of the preceding eight upswings. Indeed the increase has been larger than any of the preceding eight.

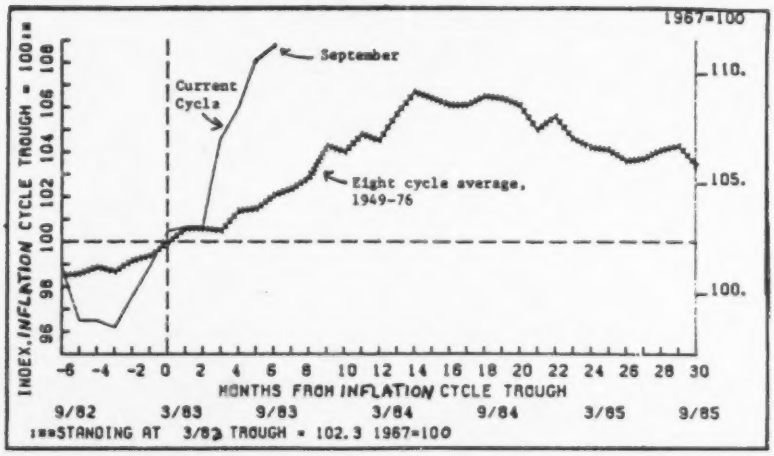
This is even more dramatically true of the rise in the leading inflation index during the same inflation cycles (see bottom panel of Chart C). There is a clear warning here that inflationary pressures are still a threat.

Chart C. INFLATION CYCLE PATTERNS

CONSUMER PRICE INDEX, RATE OF CHANGE



LEADING INDEX OF INFLATION (1967=100)



Center for International Business Cycle Research, Columbia Business School

RECESSION-RECOVERY PATTERN CHARTS

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RECESSION/RECOVERY STATUS UP TO 10 MONTHS AFTER THE BUSINESS CYCLE TROUGH

ACTUAL LEVELS

		MONTHS AFTER BUSINESS CYCLE TROUGHS	EXPANSIONS STARTING OCT 1949	MAY 1954	APR 1958	FEB 1961	EXPANSIONS STARTING NOV 1970	MAR 1975	JULY 1980	AVG. 1949 -75	CURRENT EXPANSION STARTING NOV 1982	LAST MONTH OR QUARTER AVAIL
I.	COMPOSITE INDEXES											
5.	LEADING EMPLOY. INDEX, GROWTH RATE	10	14.5	15.2	8.2	6.7	2.4	20.6	8.4	11.3	15.6	09/83
6.	COINCIDENT EMPLOY. INDEX, GROWTH RATE	10	27.9	11.8	13.2	8.2	2.3	11.9	4.8	12.5	11.5	09/83
7.	LEADING INDEX, GROWTH RATE	09	24.2	15.1	16.6	11.8	7.7	13.6	8.0	15.5	15.1	09/83
8.	COINCIDENT INDEX, GROWTH RATE	09	25.8	8.5	10.7	8.6	1.4	5.5	3.7	10.2	6.6	08/83
10.	COINCIDENT/LAGGING RATIO	09	142.1	118.2	104.5	99.2	102.1	114.2	123.6	113.4	127.1	08/83
II.	OUTPUT, INCOME AND SALES											
12.	REAL GNP GROWTH RATE	09	12.1	7.4	7.3	7.4	3.5	4.3	3.7	7.0	6.4	III/83
III.	EMPLOYMENT AND UNEMPLOYMENT											
18.	EMPLOYMENT/POPULATION RATIO	10	57.2	56.6	56.2	56.0	57.2	56.9	59.0	56.7	58.0	09/83
21.	UNEMPLOYMENT RATE, TOTAL	10	4.4	4.4	5.7	5.8	5.8	7.8	7.3	5.6	8.1	09/83
22.	UNEMPLOYMENT RATE, INSURED	10	3.7	3.8	4.7	4.8	4.1	4.5	3.3	4.3	3.4	09/83
23.	EMPLOYMENT DIFFUSION INDEX, 186 IND.	10	88.3	80.0	90.3	75.7	81.6	78.8	65.3	82.4	80.9	09/83
24.	PART-TIME EMPLOYMENT RATIO	10			2.1	2.3	4.1	3.2	3.0	2.9	2.1	09/83
27.	LAYOFF RATE	10	0.2	0.4	0.7	0.7	1.0	1.1	1.3	0.7	1.5	09/83
28.	SHORT DURATION UNEMPLOYMENT RATE	10	3.5	3.1	3.8	4.0	4.5	5.1	5.4	4.0	5.8	08/83
IV.	INVESTMENT COMMITMENTS AND INVENTORIES											
32.	INVENTORY/SALES RATIO, TIMES 10	08	13.8	14.8	15.5	14.9	16.6	16.9	16.4	15.4	15.7	07/83
33.	CH IN INVENT ON HAND & ON ORDER, BIL 72$	08	11.8	0.8	8.4	8.0	-7.3	-3.3	-0.8	3.1	7.2	07/83
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
34.	OUTPUT PER HOUR, GROWTH RATE	06	7.2	3.2	5.7	4.5	2.9	5.7	2.8	4.9	4.0	II/83
35.	UNIT LABOR COSTS, GROWTH RATE	06	-1.2	-0.7	-1.3	-1.2	3.8	2.4	7.8	0.3	1.5	II/83
36.	HOURLY COMPENSATION, GROWTH RATE	06	6.2	2.4	4.0	3.6	6.8	8.1	10.6	5.2	5.7	II/83
37.	REAL HOURLY COMPENSATION, GROWTH RATE	06	5.5	3.4	2.8	2.4	2.6	0.3	-0.2	2.8	3.0	II/83
38.	SELLING PRICE INDEX, GROWTH RATE	06	0.4	2.2	1.6	1.2	4.8	7.7	10.4	3.0	3.8	II/83
39.	PRICE/LABOR COST RATIO	06	102.6	100.7	100.4	99.6	99.1	100.4	97.8	100.5	97.3	II/83
41.	CORPORATE PROFIT MARGIN	06	11.5	10.1	9.4	9.5	7.1	7.1	5.5	9.1	7.6	II/83
43.	INDUSTRIAL MAT PRICE INDEX, GROWTH RATE	10	69.1	6.8	7.6	-0.4	-3.8	11.8	-7.5	15.2	23.7	08/83
45.	CONSUMER PRICE INDEX, GROWTH RATE	10	3.8	-0.3	0.5	0.8	3.7	7.0	9.7	2.6	3.8	09/33
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
46.	TOTAL DEBT, GROWTH RATE	09		5.2	7.8	6.3	10.2	9.2	8.7	7.8	8.8	08/83
47.	BUSINESS & CONSUMER DEBT, GROWTH RATE	09		11.3	9.2	8.5	9.7	5.1	7.5	8.8	3.0	08/83
48.	FEDERAL DEBT, GROWTH RATE	09	1.5	1.2	6.7	3.6	11.3	22.1	12.7	7.7	24.4	08/83
49.	MONEY SUPPLY (M1), GROWTH RATE	10	4.7	3.6	5.1	3.4	7.0	5.1	8.4	4.8	8.7	09/83
50.	TREASURY BILL RATE	10	1.2	1.3	2.7	2.6	4.7	4.8	16.3	2.8	9.0	09/83
51.	CORPORATE BOND YIELD	10	2.7	3.2	4.6	4.6	7.8	8.0	15.7	5.3	12.8	09/83

RECESSION/RECOVERY STATUS UP TO 10 MONTHS AFTER THE BUSINESS CYCLE TROUGH

PERCENTAGE ABOVE (+) OR BELOW (-) THE PRECEDING BUSINESS CYCLE TROUGH

		MONTHS AFTER BUSINESS CYCLE TROUGHS	EXPANSIONS STARTING OCT 1949	MAY 1954	APR 1958	FEB 1961	EXPANSIONS STARTING JULY 1970	MAR 1975	NOV 1980	AVG. 1949 -75	CURRENT EXPANSION STARTING NOV 1982	LAST MONTH OR QUARTER AVAIL
I.	COMPOSITE INDEXES											
1.	LEADING EMPLOYMENT INDEX (CIBCR)	10	16.6	11.8	12.3	8.7	4.1	12.7	8.5	11.2	13.3	09/83
2.	COINCIDENT EMPLOYMENT INDEX (CIBCR)	10	20.0	7.7	10.0	6.3	1.9	8.1	4.8	9.0	8.8	09/83
3.	LEADING INDEX (BCD)	09	15.3	13.8	14.2	8.5	7.7	12.9	7.0	12.2	13.3	08/83
4.	COINCIDENT INDEX (BCD)	09	17.1	5.7	9.1	7.4	2.4	5.2	4.3	7.8	5.7	08/83
5.	LAGGING INDEX (BCD)	09	-1.9	-3.9	-4.6	-4.9	-4.8	-11.1	-2.9	-5.2	-6.8	08/83
II.	OUTPUT, INCOME AND SALES											
11.	REAL GNP	09	10.8	5.9	8.2	5.6	3.8	4.4	3.3	6.1	5.0	III/83
13.	INDUSTRIAL PRODUCTION INDEX	10	25.1	11.1	15.7	12.3	4.3	12.3	8.1	4.8	13.6	09/83
14.	REAL PERSONAL INCOME	09	7.2	4.4	4.0	4.4	2.7	3.3	3.2	4.3	1.8	08/83
15.	REAL CONSUMER EXPENDITURES	09	5.6	4.8	4.3	3.7	3.4	4.5	2.8	4.4	3.4	08/83
16.	REAL RETAIL SALES	10	16.5	7.8	8.7	4.4	8.0	8.0	2.1	8.9	5.5	09/83
III.	EMPLOYMENT AND UNEMPLOYMENT											
17.	TOTAL EMPLOYMENT	10	3.5	1.6	1.4	0.5	1.2	2.5	2.2	1.8	2.8	09/83
18.	NONFARM EMPLOYMENT	10	6.5	2.0	3.3	2.4	1.5	2.4	1.4	3.0	1.9	09/83
20.	NONFARM EMPLOYEE-HOURS	10	8.7	3.3	4.3	2.7	0.8	3.7	1.7	3.9	3.4	09/83
25.	AVERAGE WORKWEEK, MFG.	10	4.7	3.0	3.9	2.5	-0.3	3.9	2.5	3.0	4.4	09/83
26.	OVERTIME HOURS, MFG.	10			30.0	33.3	8.7	29.2	20.0	30.3	43.5	09/83
28.	INITIAL CLAIMS, UNEMP. INSURANCE	10	-51.4	-27.2	-33.1	-26.1	-3.1	-32.0	-24.1	-28.8	-31.9	09/83
IV.	INVESTMENT COMMITMENTS AND INVENTORIES											
30.	HOUSING STARTS	10	26.0	16.3	44.8	10.1	19.6	41.3	-11.6	26.4	31.0	09/83
31.	CONTRACTS & ORDERS, PLANT & EQUIP.	08	62.8	34.7	13.8	10.2	7.8	-8.1	5.5	20.2	11.8	08/83
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
40.	BUSINESS FAILURES	10	-50.0	-4.0	-14.3	-5.8	-14.3	-2.7	35.9	-15.2	-5.6	09/83
42.	INDUSTRIAL MATERIALS PRICE INDEX	10	36.9	4.9	9.2	1.2	-3.9	7.2	-0.1	9.2	24.4	09/83
44.	LEADING INDEX OF INFLATION	10	23.5	4.0	9.1	2.5	6.7	8.6	4.3	9.1	12.8	09/83
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
52.	STOCK PRICE INDEX (S&P 500)	10	16.4	28.3	28.2	15.7	15.3	16.9	10.4	20.1	22.3	09/83

RECESSION/RECOVERY STATUS UP TO 10 MONTHS AFTER THE BUSINESS CYCLE TROUGH

DIFFERENCE FROM THE PRECEDING BUSINESS CYCLE TROUGH

		MONTHS AFTER BUSINESS CYCLE TROUGHS	EXPANSIONS STARTING OCT 1949	MAY 1954	APR 1958	FEB 1961	EXPANSIONS STARTING NOV 1970	MAR 1975	JULY 1980	AVG. 1949 -75	CURRENT EXPANSION STARTING NOV 1982	LAST MONTH OR QUARTER AVAIL
I.	COMPOSITE INDEXES											
5.	LEADING EMPLOY. INDEX, GROWTH RATE	10	15.2	16.4	9.8	7.1	6.7	36.5	18.8	15.3	20.4	09/83
6.	COINCIDENT EMPLOY. INDEX, GROWTH RATE	10	41.8	25.7	31.7	16.3	9.5	28.7	12.7	25.6	19.8	09/83
7.	LEADING INDEX, GROWTH RATE	09	14.3	17.0	19.7	10.5	8.5	27.1	13.6	16.2	10.6	08/83
8.	COINCIDENT INDEX, GROWTH RATE	09	33.0	17.9	25.3	16.3	7.0	20.6	12.5	20.0	13.4	08/83
10.	COINCIDENT/LAGGING RATIO	09	23.0	10.8	13.0	11.4	7.2	17.5	8.5	13.8	15.0	08/83
II.	OUTPUT, INCOME AND SALES											
12.	REAL GNP GROWTH RATE	09	13.1	10.6	9.5	7.3	3.7	9.6	5.8	9.0	7.6	III/83
III.	EMPLOYMENT AND UNEMPLOYMENT											
18.	EMPLOYMENT/POPULATION RATIO	10	1.7	0.3	0.2	-0.3	-0.3	0.4	0.6	0.3	1.1	09/83
21.	UNEMPLOYMENT RATE, TOTAL	10	-2.4	-1.2	-1.3	-0.8	0.1	-0.5	-0.3	-1.0	-1.4	09/83
22.	UNEMPLOYMENT RATE, INSURED	10	-1.8	-1.8	-2.2	-1.5	0.0	-1.8	-1.0	-1.8	-1.7	09/83
23.	EMPLOYMENT DIFFUSION INDEX, 186 IND.	10	69.4	75.0	78.4	55.4	35.8	64.7	38.3	62.8	59.7	09/83
24.	PART-TIME EMPLOYMENT RATIO	10			0.8	0.6	0.3	0.4	0.0	0.5	0.2	09/83
27.	LAYOFF RATE	10	-1.3	-1.3	-0.6	-0.5	-0.1	-0.9	-0.6	-0.8	-1.0	09/83
28.	SHORT DURATION UNEMPLOYMENT RATE	10	-1.7	-1.2	-1.0	-0.7	-0.1	-0.9	-0.3	-0.9	-0.8	09/83
IV.	INVESTMENT COMMITMENTS AND INVENTORIES											
32.	INVENTORY/SALES RATIO, TIMES 10	08	-1.5	-1.3	-0.9	-0.9	-0.6	-0.8	-0.7	-1.0	-1.9	07/83
33.	CH IN INVENT ON HAND & ON ORDER, BIL 72$	08	10.7	16.7	25.6	18.9	-6.5	27.1	12.2	15.4	22.8	07/83
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
34.	OUTPUT PER HOUR, GROWTH RATE	06	6.9	2.7	3.2	3.6	2.0	6.6	2.8	4.2	2.7	II/83
35.	UNIT LABOR COSTS, GROWTH RATE	06	-1.6	-2.9	-2.3	-3.0	-1.5	-9.6	-2.7	-3.5	-3.9	II/83
36.	HOURLY COMPENSATION, GROWTH RATE	06	5.4	-0.6	0.5	0.9	0.3	-2.8	-0.2	0.6	-0.9	II/83
37.	REAL HOURLY COMPENSATION, GROWTH RATE	06	2.7	1.0	2.6	0.9	1.5	0.0	0.8	1.4	1.0	II/83
38.	SELLING PRICE INDEX, GROWTH RATE	06	0.8	0.4	1.3	0.9	-0.4	-5.6	0.7	-0.4	0.2	II/83
39.	PRICE/LABOR COST RATIO	06	1.6	1.8	1.8	1.9	1.0	3.2	1.8	1.9	1.5	II/83
41.	CORPORATE PROFIT MARGIN	06	-1.1	0.9	1.4	0.9	1.0	2.3	1.0	0.9	2.0	II/83
43.	INDUSTRIAL MAT PRICE INDEX, GROWTH RATE	10	85.2	1.1	21.4	2.1	6.8	39.6	0.7	26.0	41.6	09/83
45.	CONSUMER PRICE INDEX, GROWTH RATE	10	5.7	-0.7	-3.2	-0.6	-1.6	-2.7	-2.8	-0.5	-0.6	09/73
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
46.	TOTAL DEBT, GROWTH RATE	09		2.5	5.5	2.4	5.4	2.2	2.1	3.6	3.9	08/83
47.	BUSINESS & CONSUMER DEBT, GROWTH RATE	09		4.8	5.4	1.0	4.9	-0.6	2.0	3.1	2.9	08/83
48.	FEDERAL DEBT, GROWTH RATE	09	0.1	0.7	5.6	4.0	6.5	10.9	2.4	4.6	4.6	08/83
49.	MONEY SUPPLY (M1), GROWTH RATE	10	5.4	2.6	4.5	1.8	1.6	1.5	3.1	2.9	0.6	09/83
50.	TREASURY BILL RATE	10	0.1	0.5	1.6	0.3	-0.7	-0.7	8.2	0.2	1.1	09/83
51.	CORPORATE BOND YIELD	10	0.1	0.3	0.7	0.1	-0.8	-0.4	4.0	0.0	0.6	09/83

RECESSION - RECOVERY PATTERNS

———————— Current recovery to date (business cycle trough: November 1982 or IV Q 1982)

//////////// Average of six recoveries (1949-54, 1954-57, 1958-60, 1961-69, 1970-73, 1975-80)

How to Read the Charts

The charts show how the current recovery, dated from November 1982, compares with the average previous recovery over the same length of time. They also show how the average recovery developed beyond this point, and hence what a forecast based on that average would look like. Forecasts based upon other information can be evaluated against this background.

The horizontal time scale in each chart shows the number of months before (-) or after the business cycle trough (0). For the current cycle November 1982 is zero, May 1983 is Month 6, etc. The vertical scale on the left side for most series is an index with the three-month average centered on the business cycle trough date equal to 100. This three-month average is called the peak standing. For the current cycle, the figures plotted are indexes with the October to December 1982 average equal to 100. Each of the previous cycles are converted to indexes in the same way, and then the corresponding months are averaged for the six cycles, 1949-80. Quarterly series (e.g., GNP) are treated in the same way as monthly except that quarterly business cycle trough dates are used and each quarter is plotted as a horizontal line for three months.

When the figures are percentages (e.g., the unemployment rate, the inflation rate, or GNP growth rate), the figures shown represent the actual levels of the data, rather than deviations from trough standings.

On all charts the right-hand scale applies to the current cycle, so that one can see where new figures or forecasts would be placed. Also, this scale shows how the averages for previous recoveries would translate to current levels. The November 1982 trough standing for the current cycle is shown at the bottom of the chart for reference purposes.

The averages include only six cycles rather than seven, because the 1980-81 recovery lasted only 12 months from trough (July 1980) to peak (July 1981). Averages extending beyond 12 months would begin to include the 1981-82 recession.

All the growth rates shown are six-month smoothed rates (or two-quarter smoothed), obtained by dividing the current month's index by the average for the twelve preceding months, and expressing the result as a compound annual rate.

Data in some charts are a month or a quarter more up-to-date than in Table 1.

CHART 1

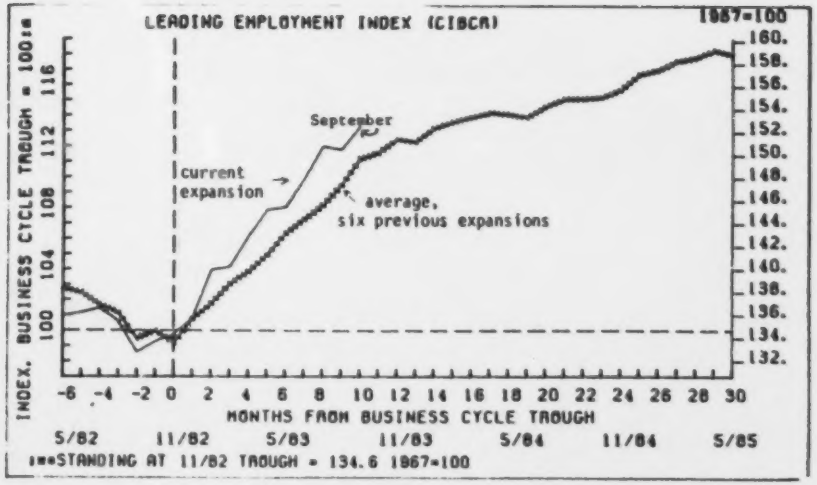

LEADING EMPLOYMENT INDEX (CIBCR)
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100=
September
current expansion
average, six previous expansions
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
=STANDING AT 11/82 TROUGH = 134.6 1967=100

CHART 2

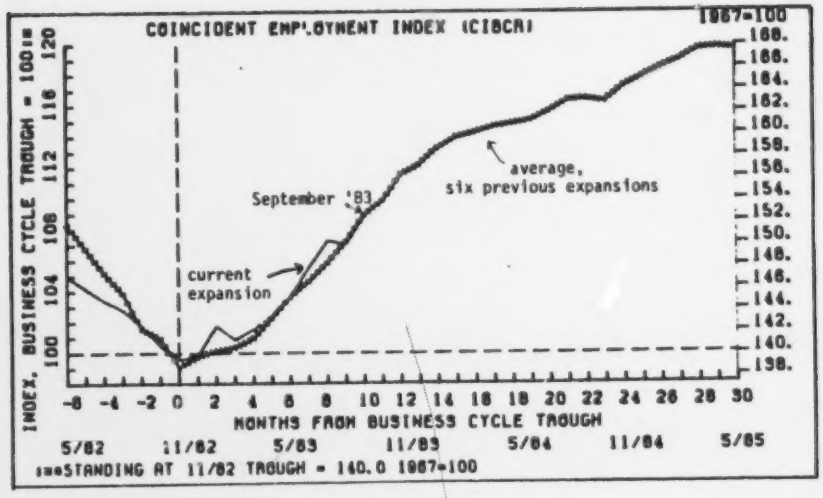

COINCIDENT EMPLOYMENT INDEX (CIBCR)
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100=
September '83
average, six previous expansions
current expansion
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
=STANDING AT 11/82 TROUGH = 140.0 1967=100

CHART 3

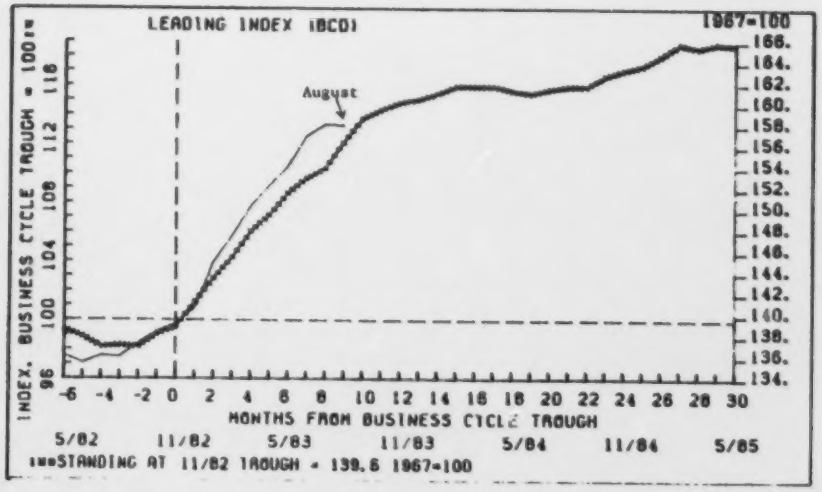

LEADING INDEX (BCD)
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100=
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
=STANDING AT 11/82 TROUGH = 139.8 1967=100

CHART 4

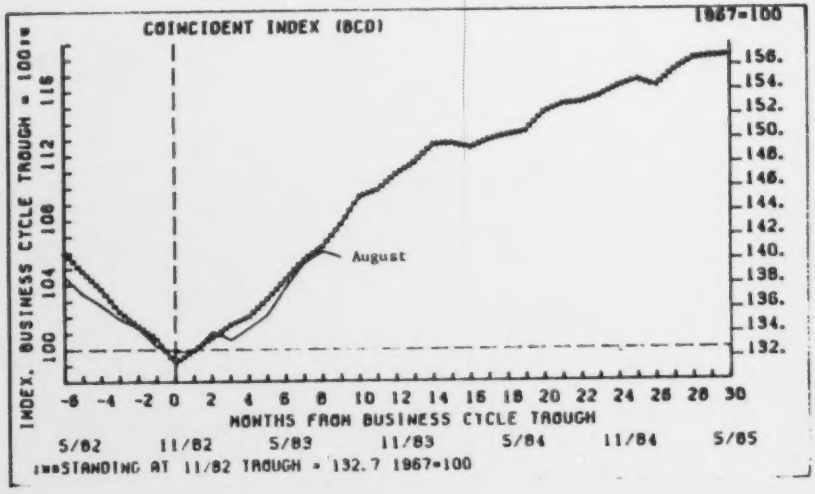

COINCIDENT INDEX (BCD)
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100=
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
=STANDING AT 11/82 TROUGH = 132.7 1967=100

CHART 5

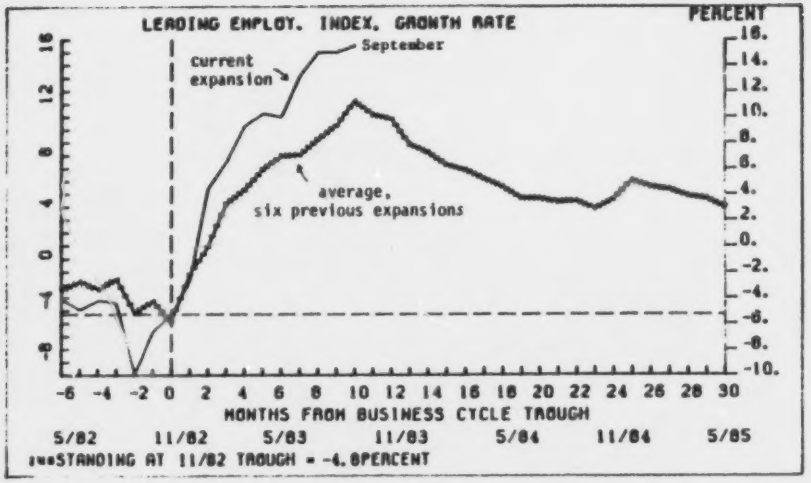


CHART 6

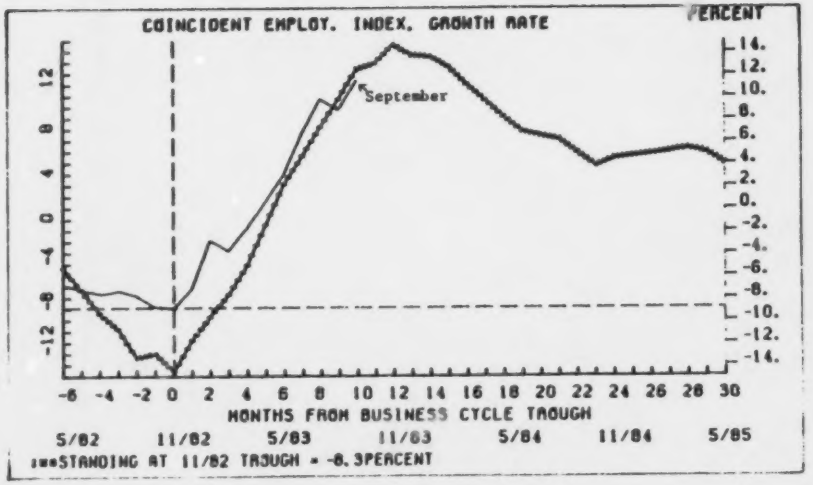

COINCIDENT EMPLOY. INDEX, GROWTH RATE
PERCENT
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = -8.3PERCENT

CHART 7

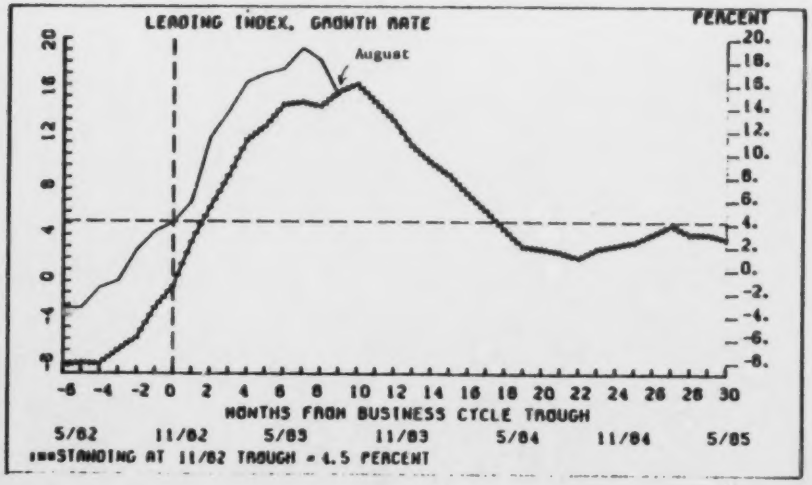

LEADING INDEX, GROWTH RATE
PERCENT
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 4.5 PERCENT

CHART 8

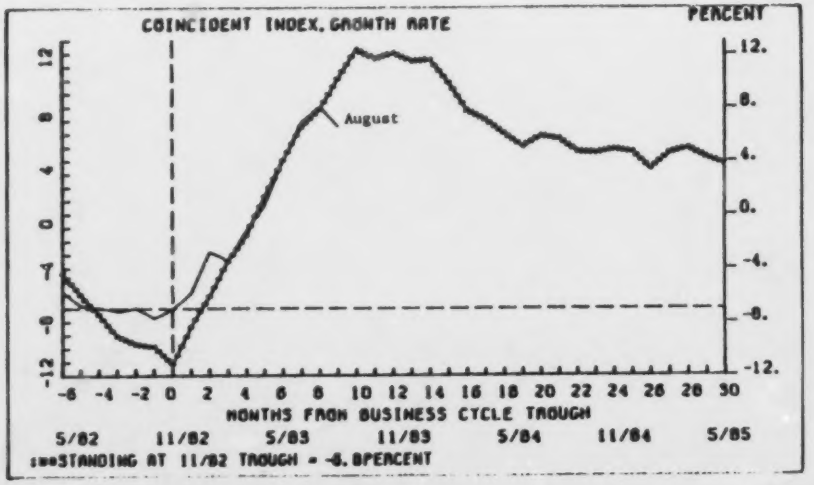

COINCIDENT INDEX, GROWTH RATE
PERCENT
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = -6.8PERCENT

CHART 9

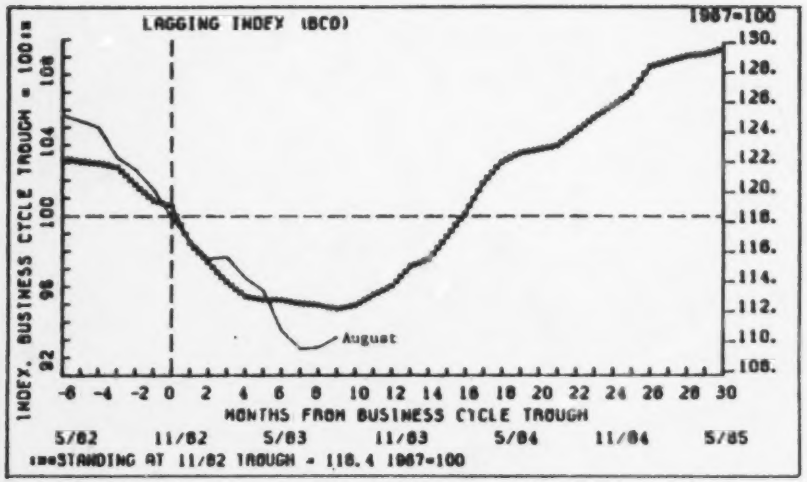

LAGGING INDEX (BCD)
1987=100
INDEX, BUSINESS CYCLE TROUGH = 100
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 118.4 1987=100

CHART 10

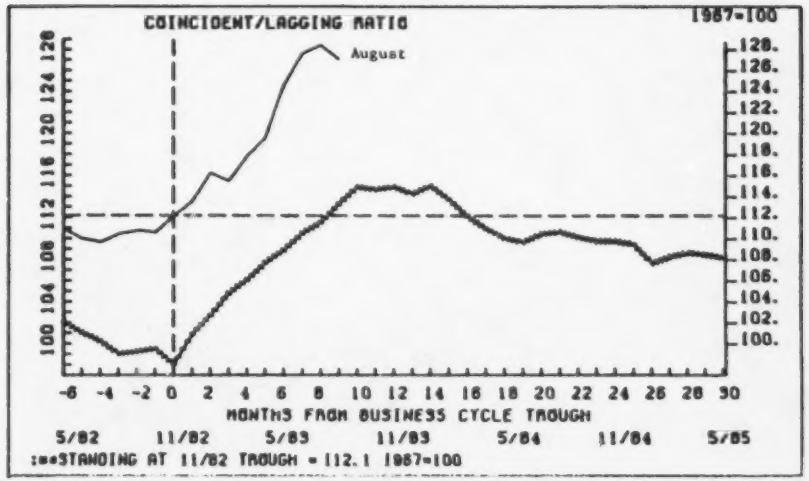


CHART 11

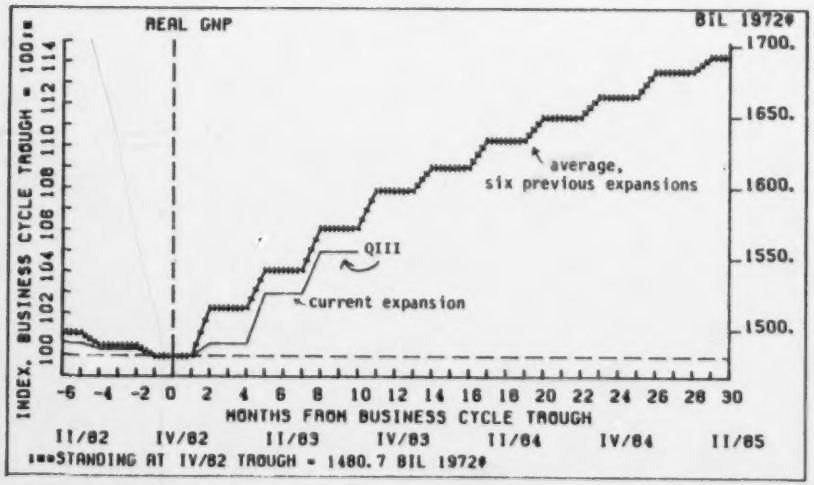

REAL GNP
BIL 1972$
INDEX, BUSINESS CYCLE TROUGH = 100
average, six previous expansions
QIII
current expansion
MONTHS FROM BUSINESS CYCLE TROUGH
II/82 IV/82 II/83 IV/83 II/84 IV/84 II/85
STANDING AT IV/82 TROUGH = 1480.7 BIL 1972$

CHART 12

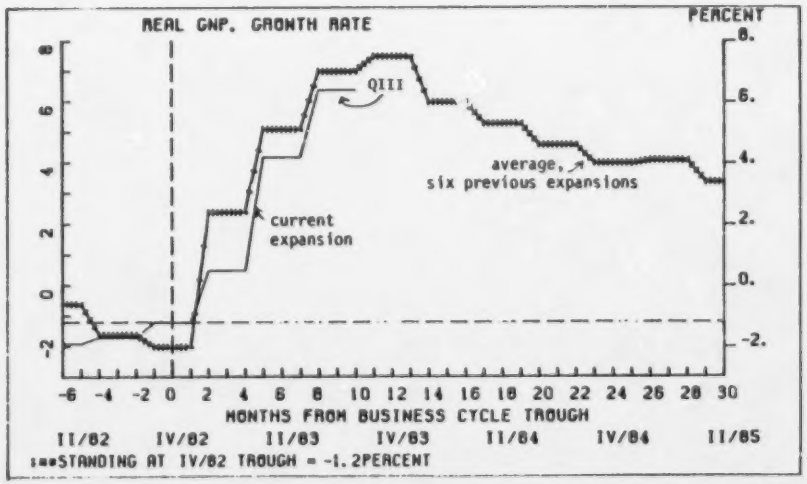


CHART 13

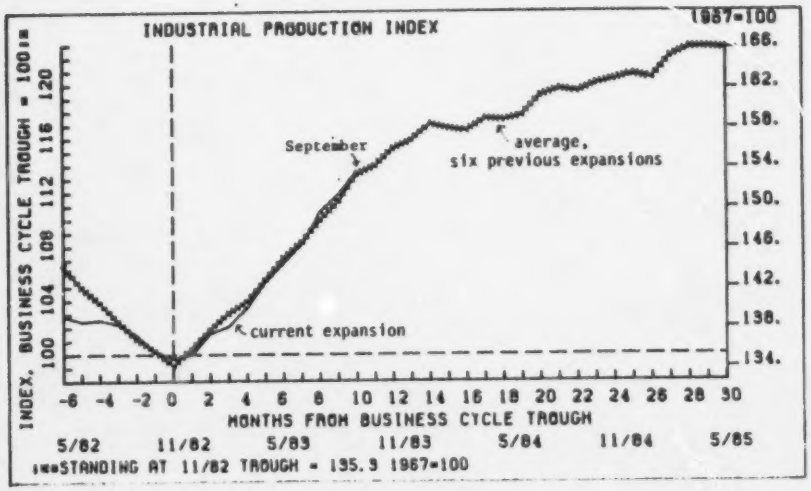

INDUSTRIAL PRODUCTION INDEX
1987=100
INDEX, BUSINESS CYCLE TROUGH = 100
September
average, six previous expansions
current expansion
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 135.9 1987=100

CHART 14

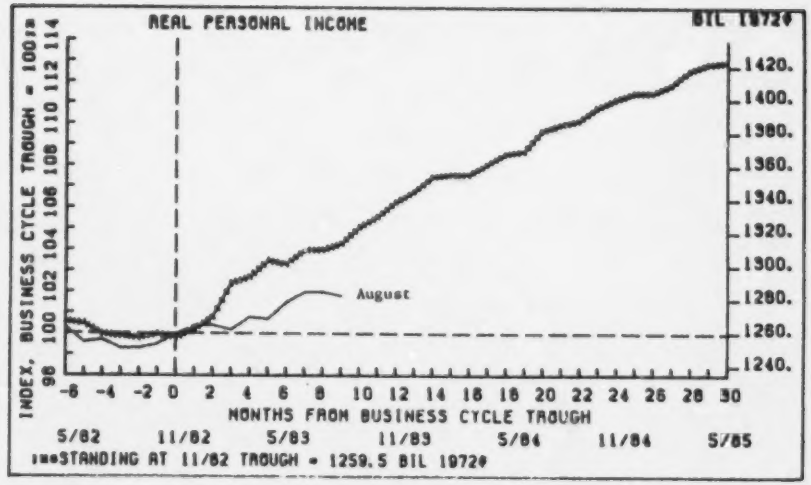

REAL PERSONAL INCOME
BIL 1972$
INDEX, BUSINESS CYCLE TROUGH = 100
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 1259.5 BIL 1972$

CHART 15

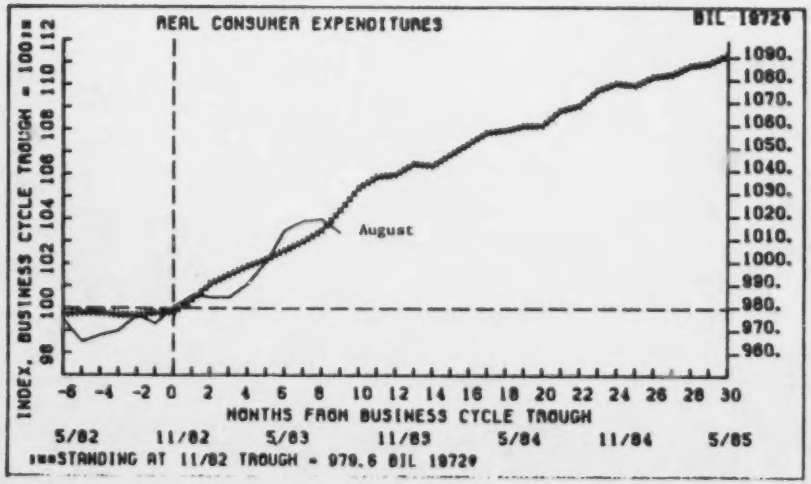

REAL CONSUMER EXPENDITURES
BIL 1972$
INDEX, BUSINESS CYCLE TROUGH = 100
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 979.6 BIL 1972$

CHART 16

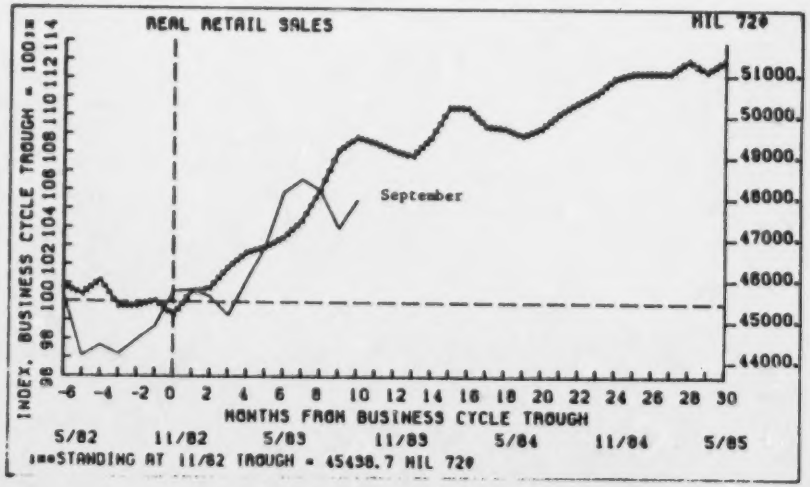

REAL RETAIL SALES
MIL 72$
INDEX, BUSINESS CYCLE TROUGH = 100
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 45438.7 MIL 72$

CHART 17

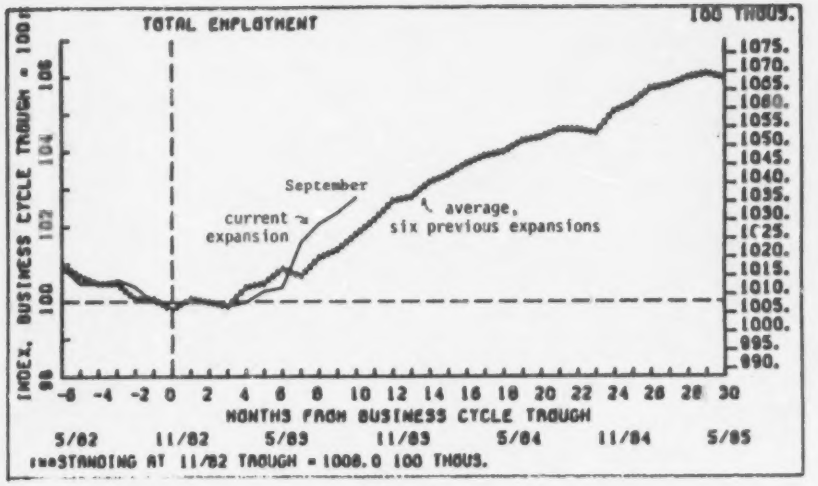

TOTAL EMPLOYMENT
100 THOUS.
INDEX, BUSINESS CYCLE TROUGH = 100
September
current expansion
average, six previous expansions
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 1008.0 100 THOUS.

CHART 18

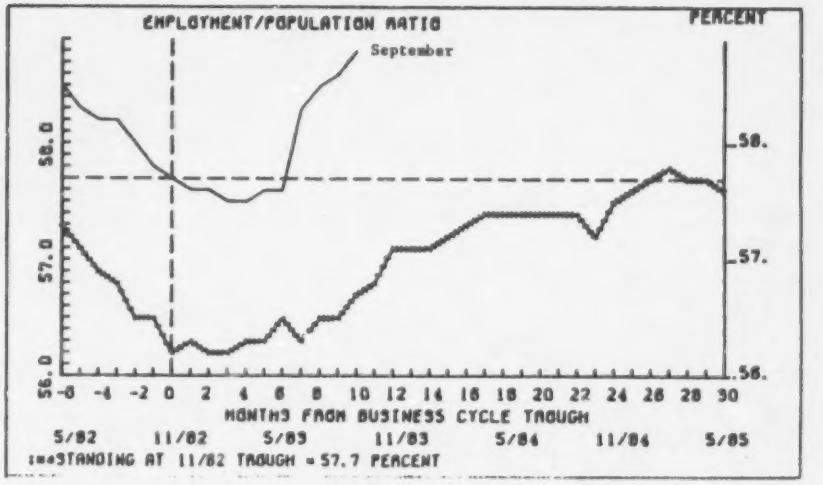


CHART 19

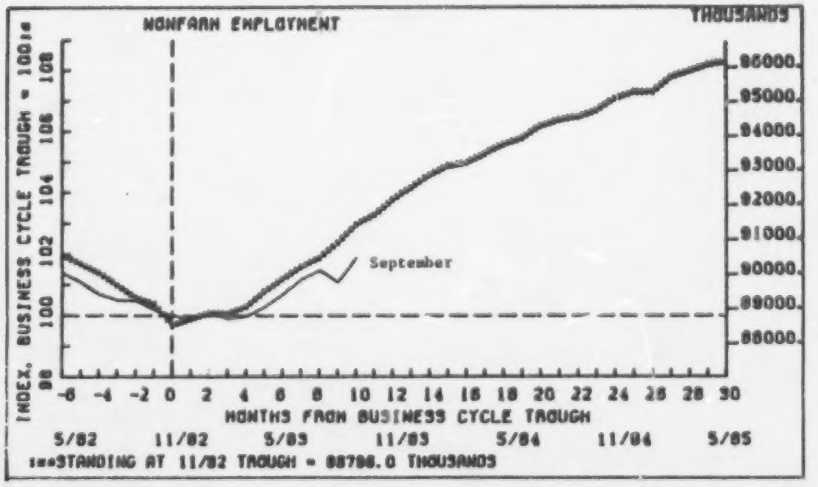

NONFARM EMPLOYMENT
THOUSANDS
INDEX, BUSINESS CYCLE TROUGH = 100
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 88798.0 THOUSANDS

CHART 20

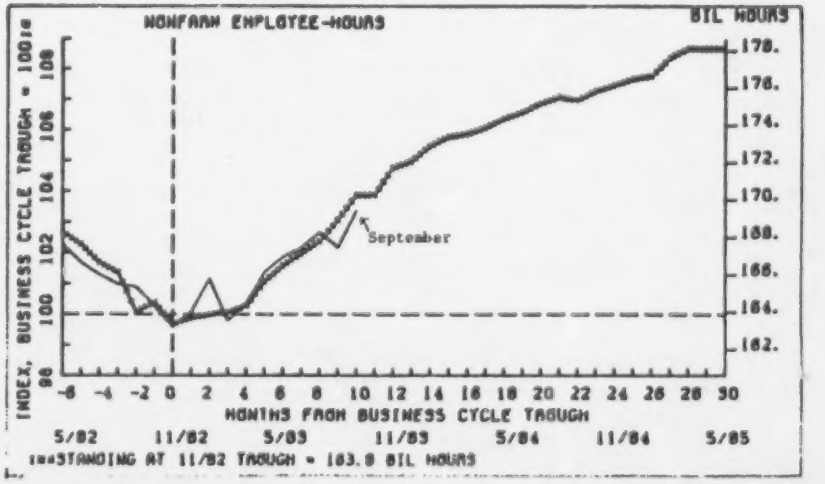

NONFARM EMPLOYEE-HOURS
BIL HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 163.9 BIL HOURS

CHART 21

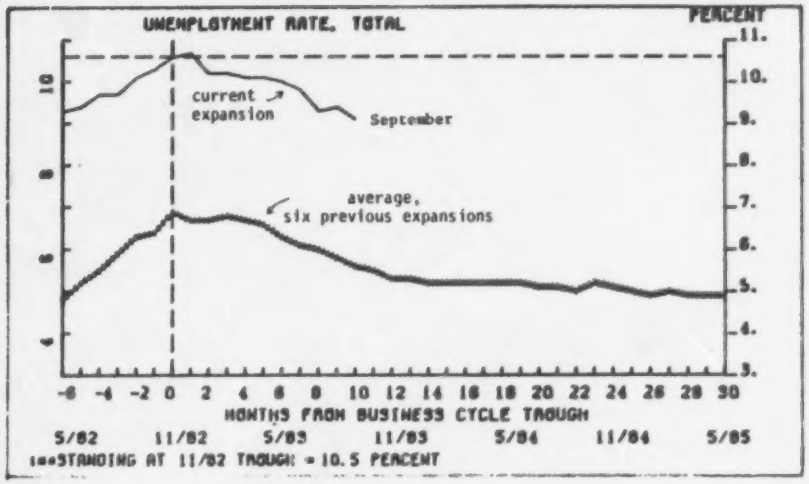


CHART 22

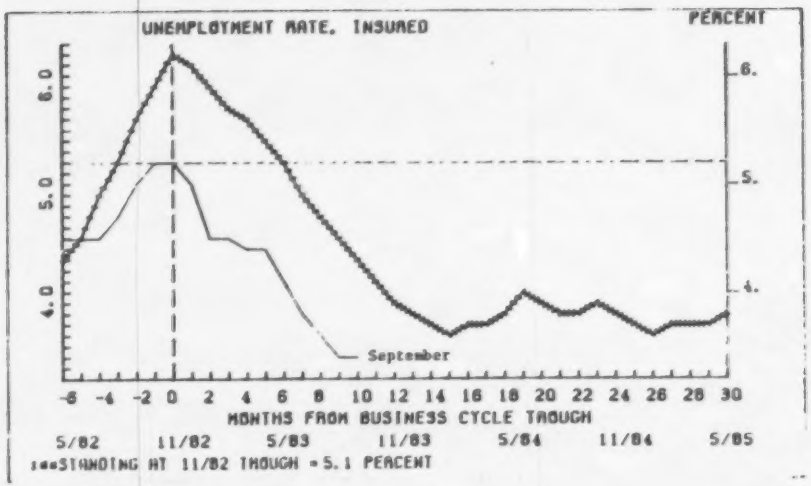

UNEMPLOYMENT RATE, INSURED
PERCENT
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 5.1 PERCENT

CHART 23

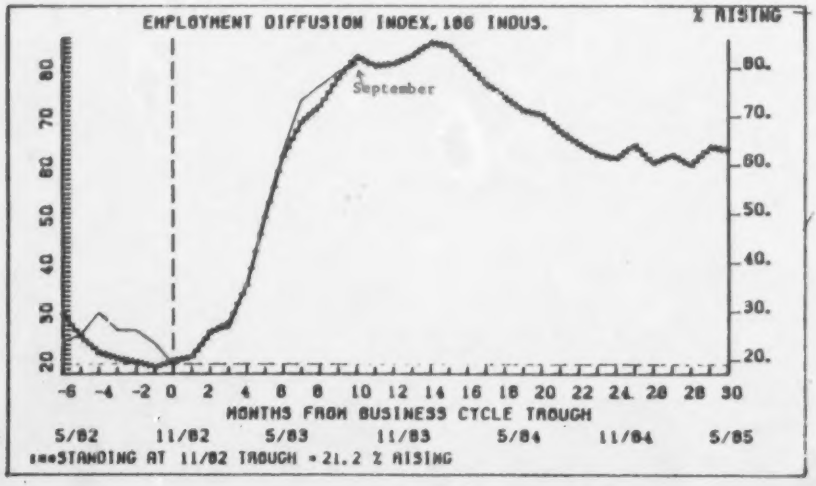

EMPLOYMENT DIFFUSION INDEX, 186 INDUS.
% RISING
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 21.2 % RISING

CHART 24

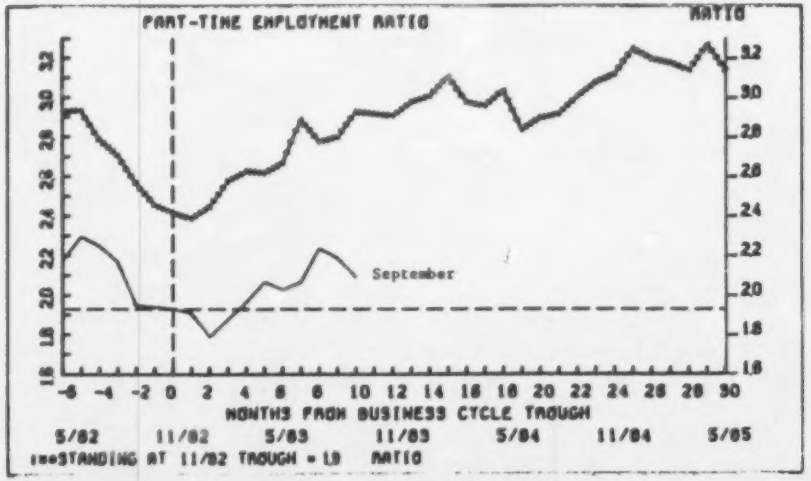

PART-TIME EMPLOYMENT RATIO
RATIO
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 19 RATIO

CHART 25

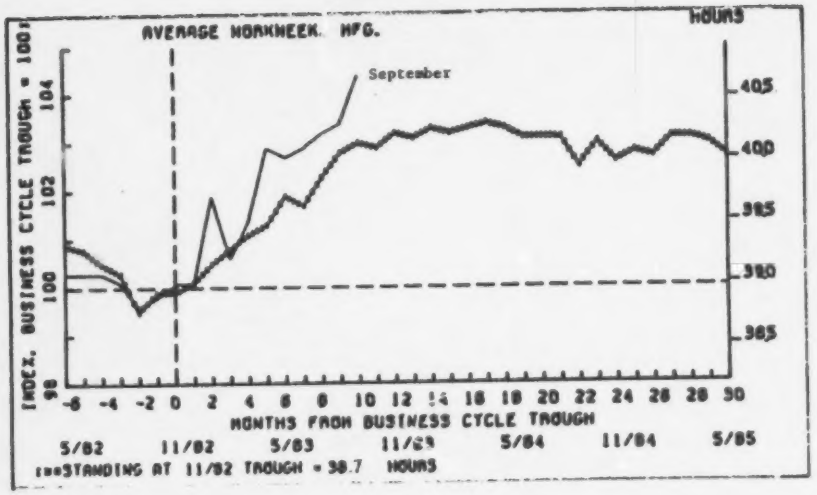


CHART 26

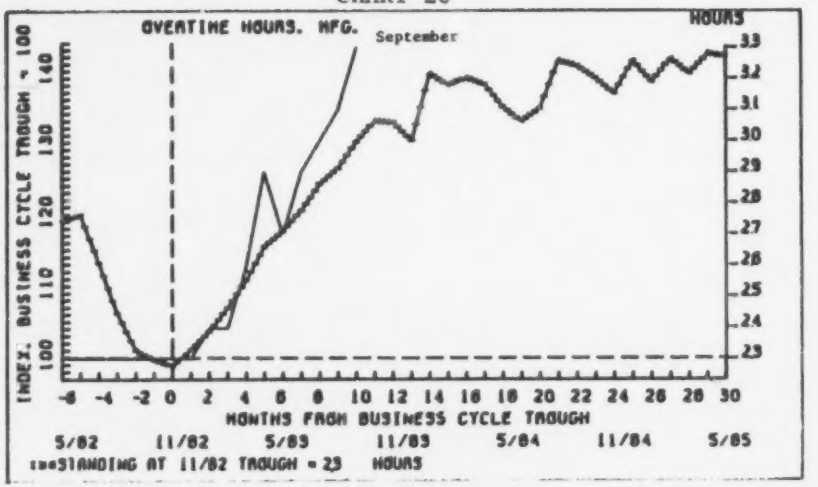


CHART 27

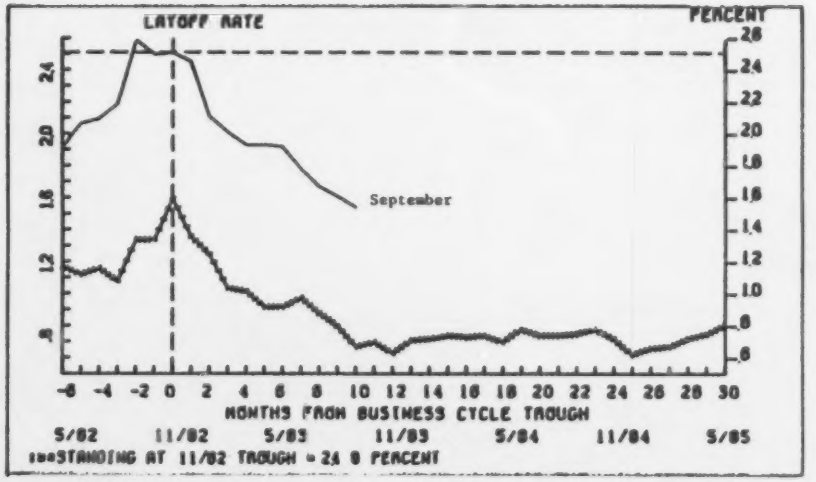


CHART 28

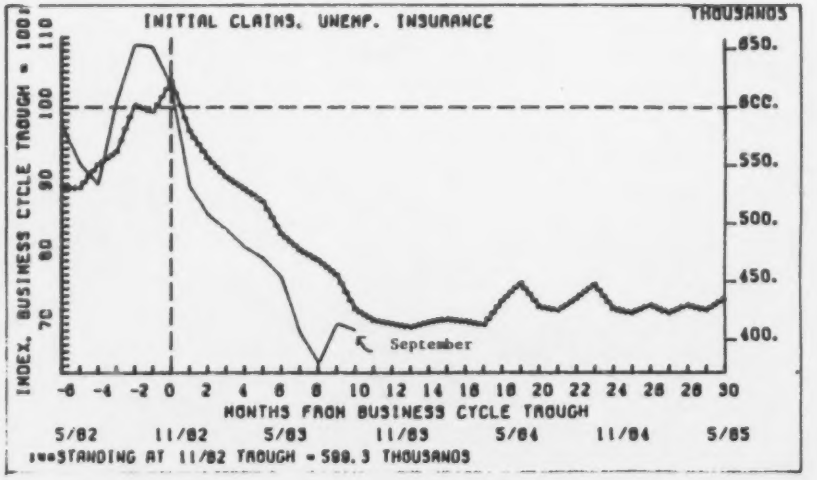


CHART 29

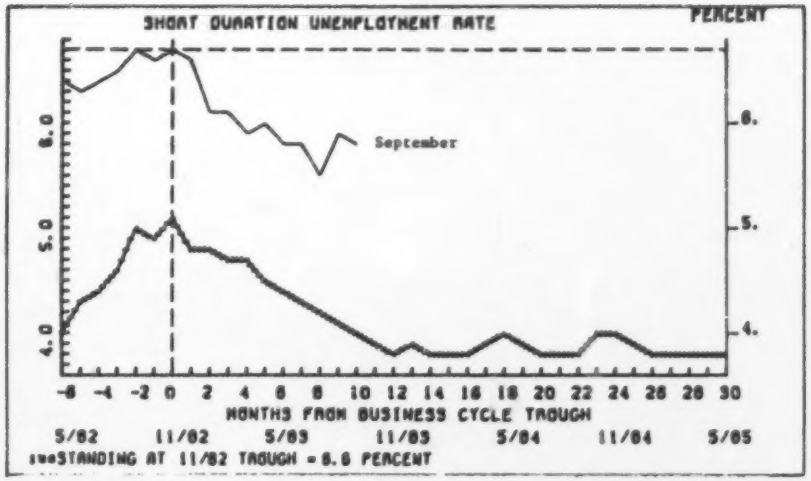


CHART 30

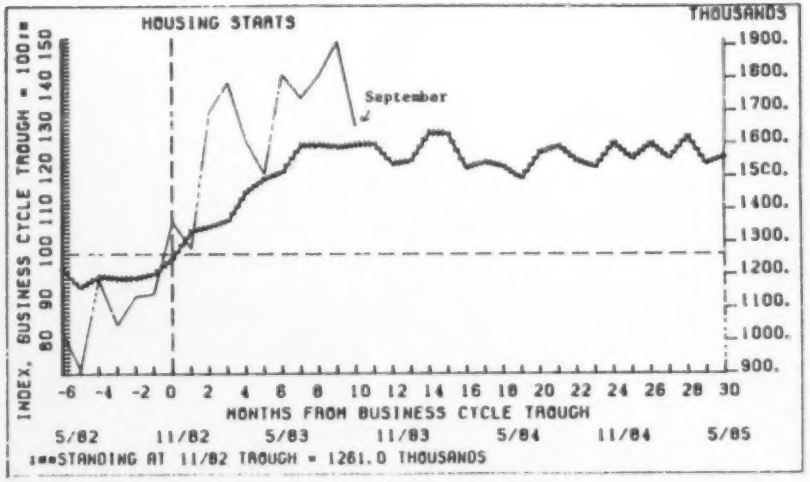


CHART 31

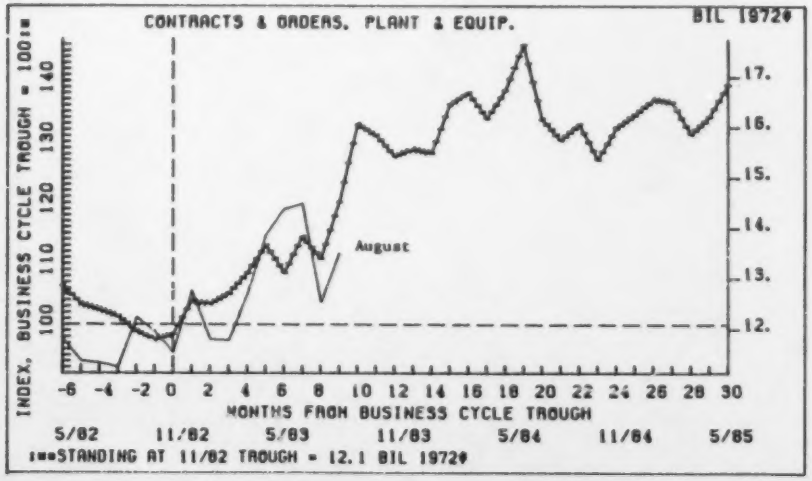

CONTRACTS & ORDERS, PLANT & EQUIP.
BIL 1972$
INDEX, BUSINESS CYCLE TROUGH = 100:=
100 110 120 130 140
August
17.
16.
15.
14.
13.
12.
-6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
1==STANDING AT 11/82 TROUGH = 12.1 BIL 1972$

CHART 32

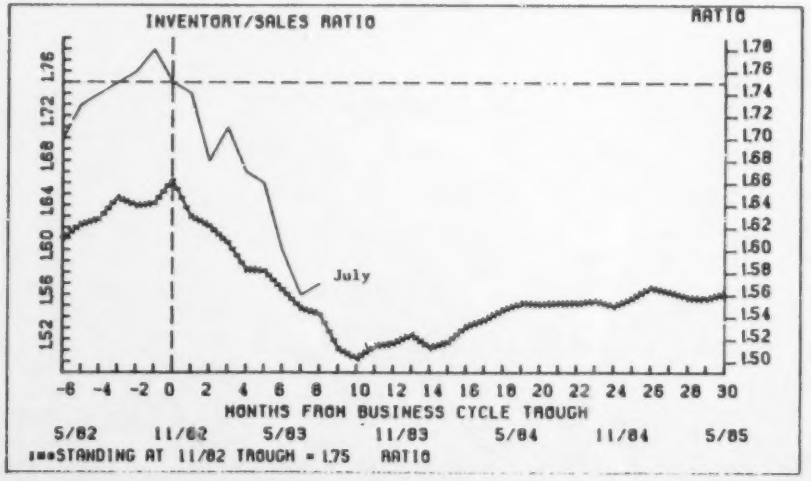


CHART 33

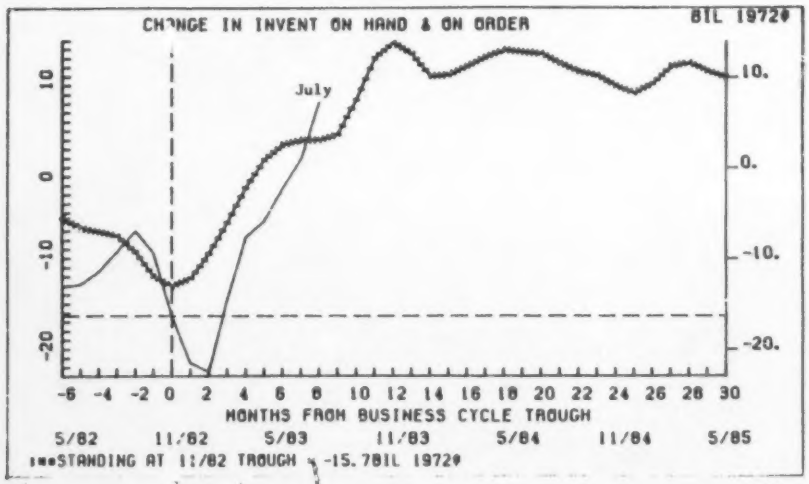

CHANGE IN INVENT ON HAND & ON ORDER
BIL 1972$
July
10.
0.
-10.
-20.
-6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT II/82 TROUGH = -15.7BIL 1972$

CHART 34

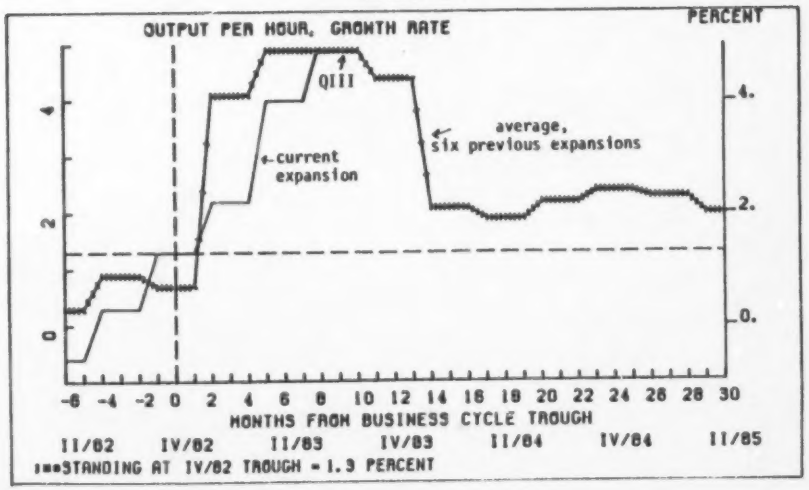


CHART 35

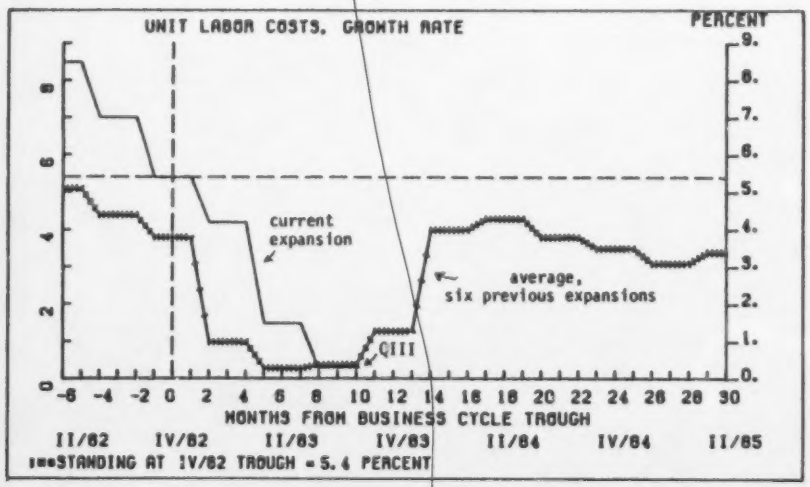


CHART 36

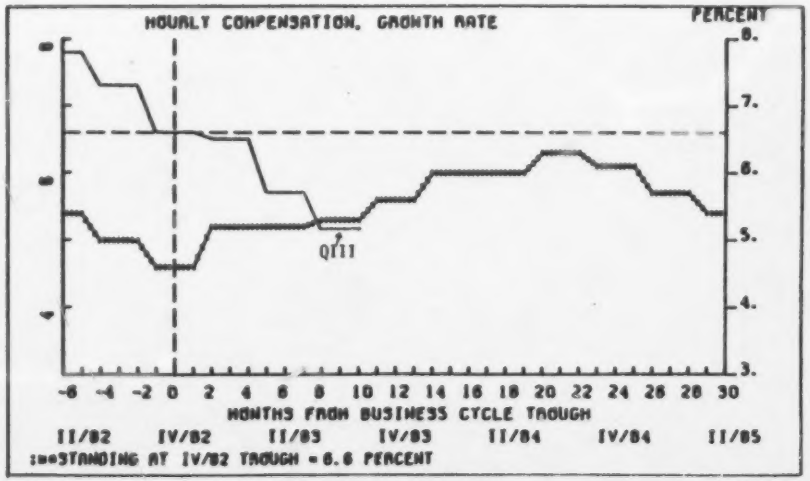


CHART 37

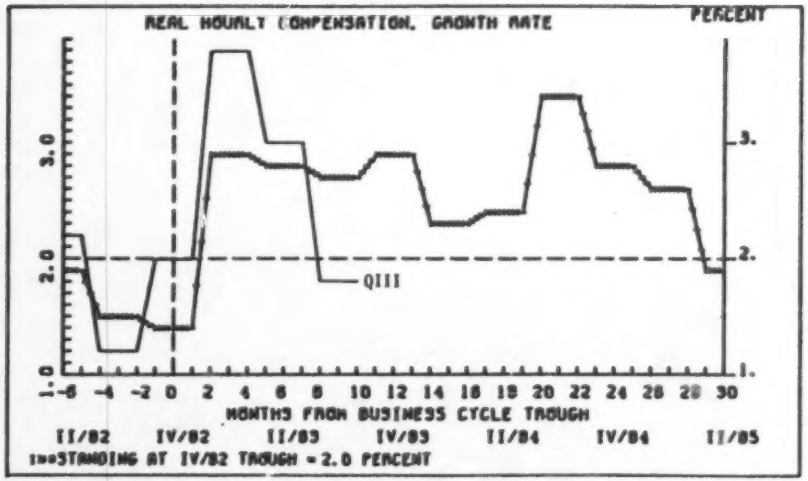


CHART 38

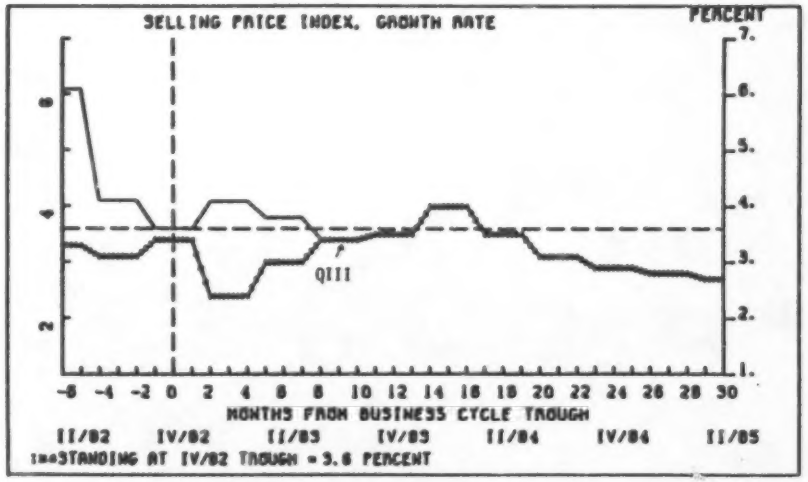


CHART 39

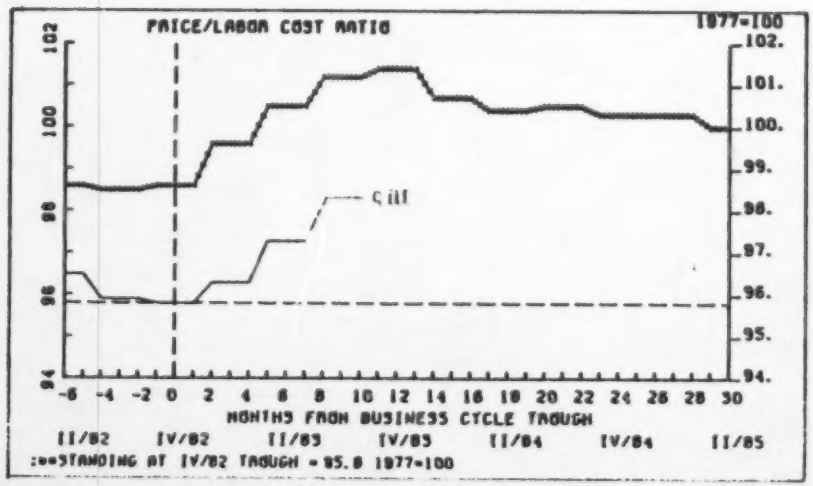


CHART 40

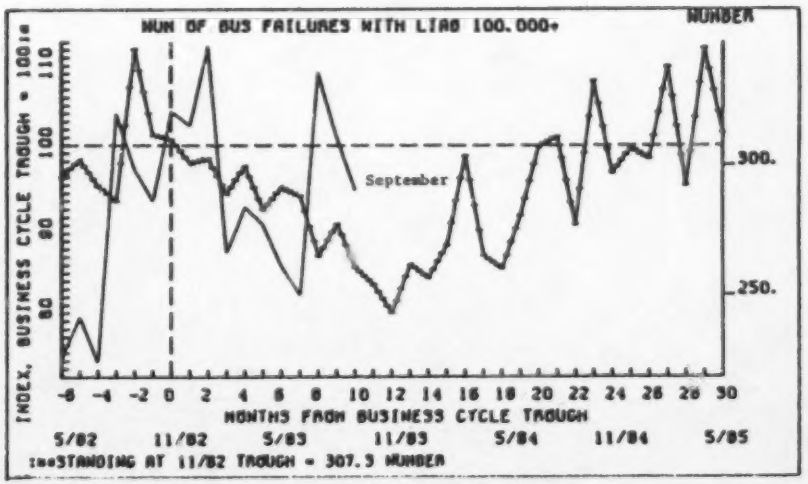

NUM OF BUS FAILURES WITH LIAB 100,000+
NUMBER
INDEX, BUSINESS CYCLE TROUGH = 100:=
110
100
90
80
300.
250.
September
-6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
:=STANDING AT 11/82 TROUGH = 307.3 NUMBER

CHART 41

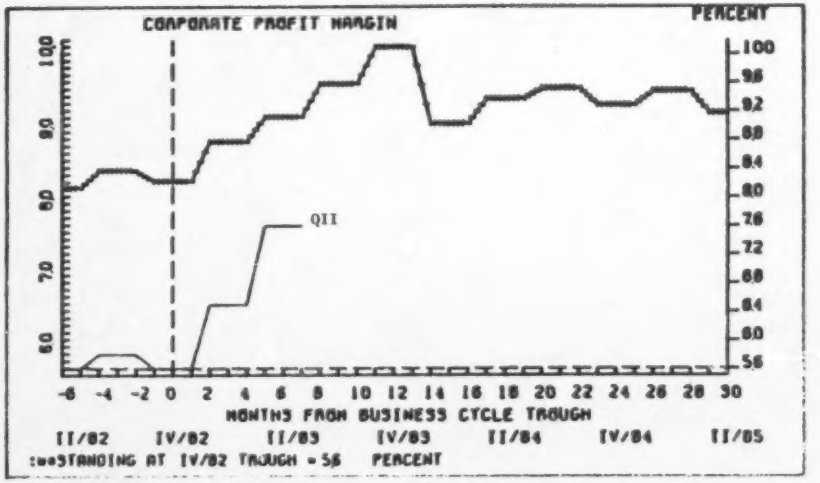

CORPORATE PROFIT MARGIN
PERCENT
QII
MONTHS FROM BUSINESS CYCLE TROUGH
II/82 IV/82 II/83 IV/83 II/84 IV/84 II/85
STANDING AT IV/82 TROUGH = 58 PERCENT

CHART 42

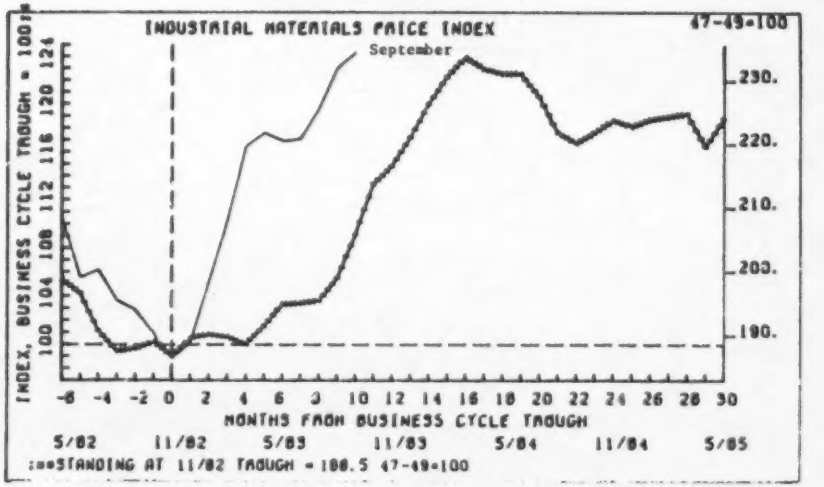

INDUSTRIAL MATERIALS PRICE INDEX
47-49=100
September
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 100.5 47-49=100

CHART 43

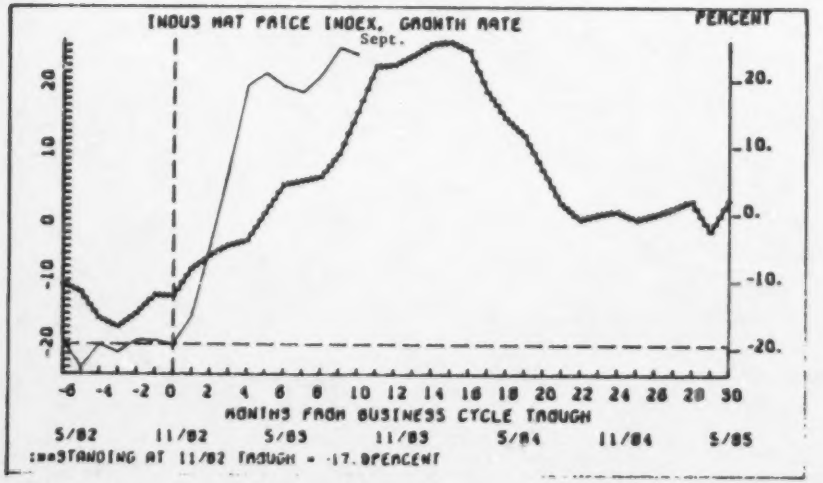

INDUS MAT PRICE INDEX, GROWTH RATE
PERCENT
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = -17.0PERCENT

CHART 44

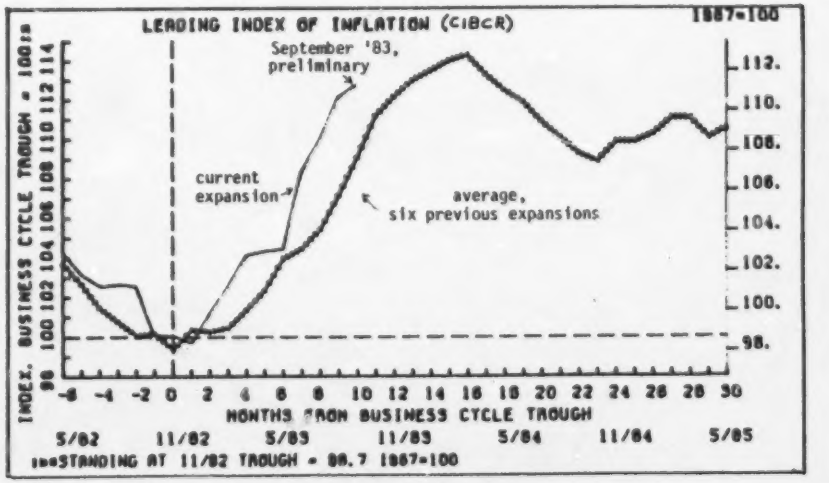

LEADING INDEX OF INFLATION (CIBCR)
1967=100
September '83, preliminary
current expansion
average, six previous expansions
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 98.7 1967=100

CHART 45

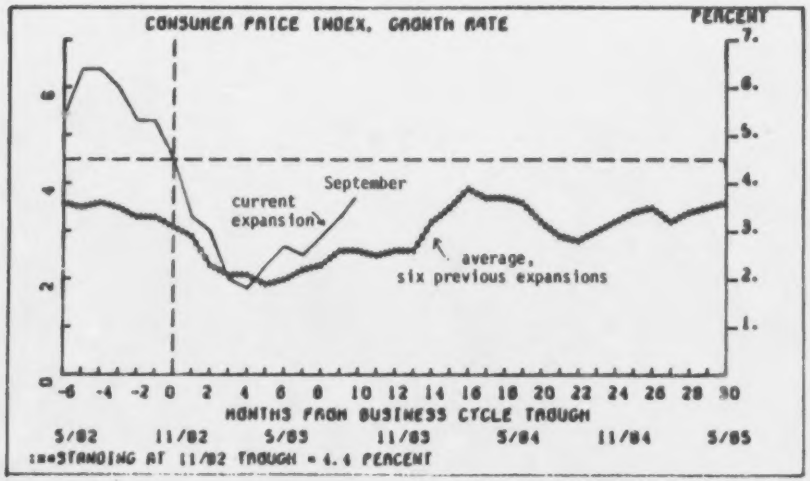

CONSUMER PRICE INDEX, GROWTH RATE
PERCENT
September
current expansion
average, six previous expansions
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 4.4 PERCENT

CHART 46

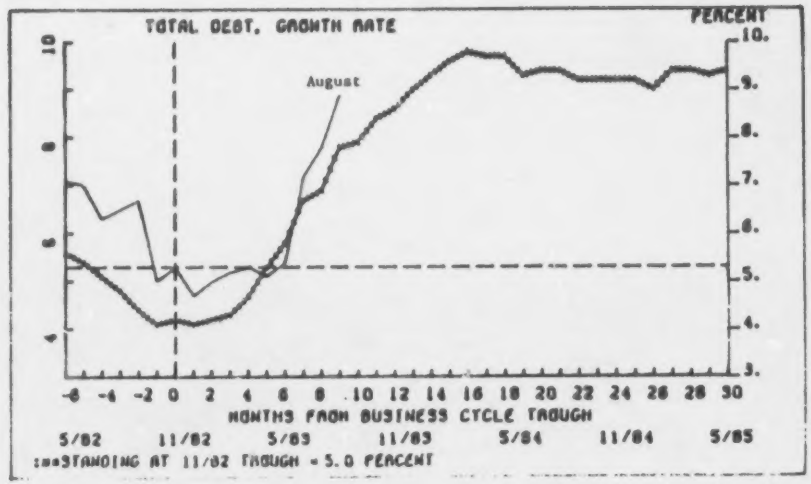

TOTAL DEBT, GROWTH RATE
PERCENT
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 5.0 PERCENT

CHART 47

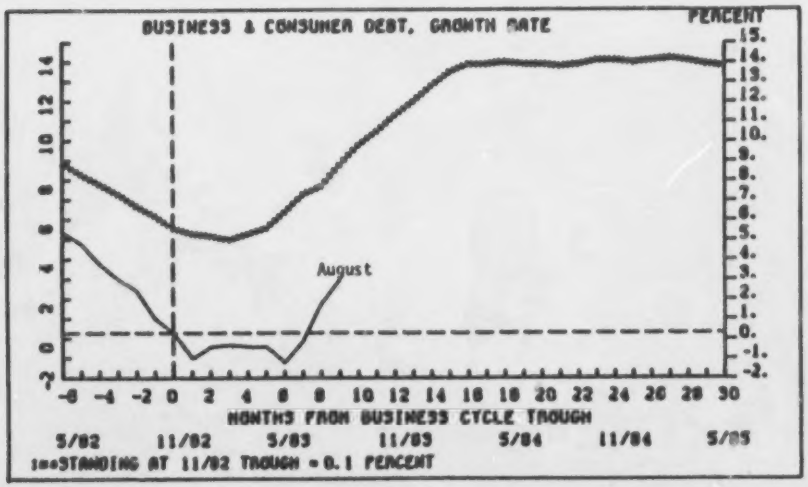

BUSINESS & CONSUMER DEBT, GROWTH RATE
PERCENT
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 0.1 PERCENT

CHART 48

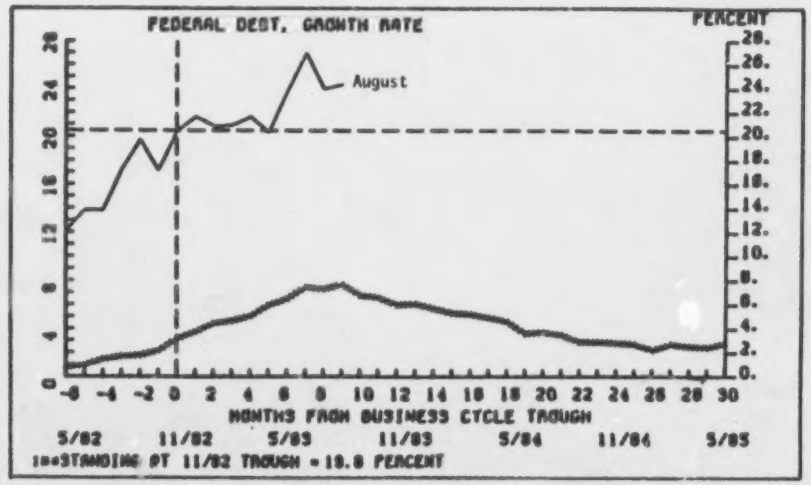

FEDERAL DEBT, GROWTH RATE
PERCENT
August
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 19.8 PERCENT

CHART 49

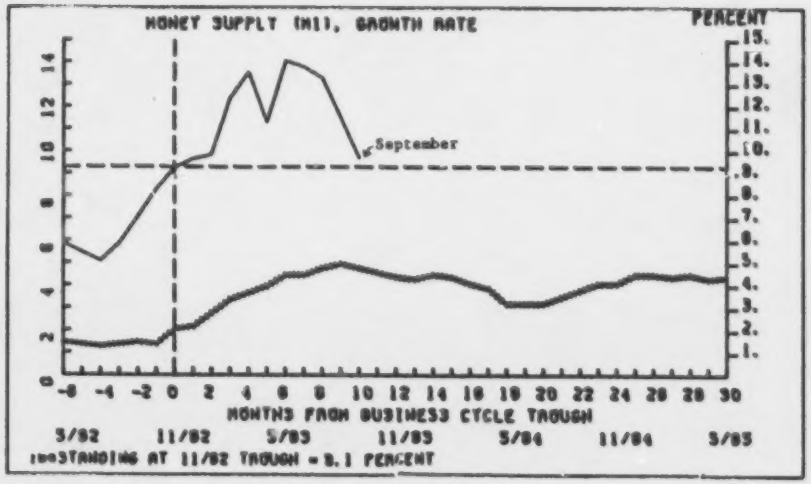

MONEY SUPPLY (M1), GROWTH RATE
PERCENT
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 8.1 PERCENT

CHART 50

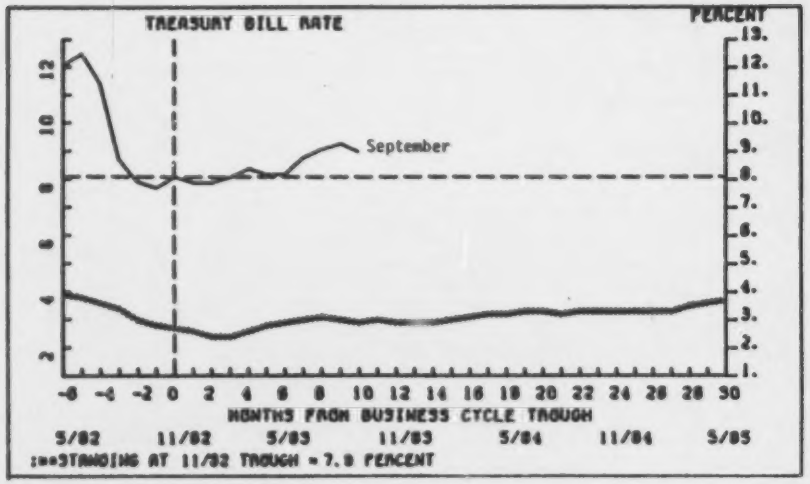

TREASURY BILL RATE
PERCENT
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 7.9 PERCENT

CHART 51

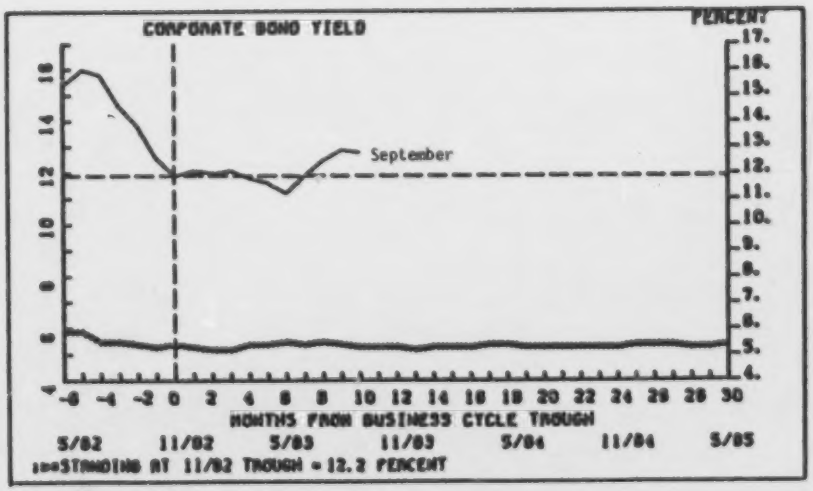
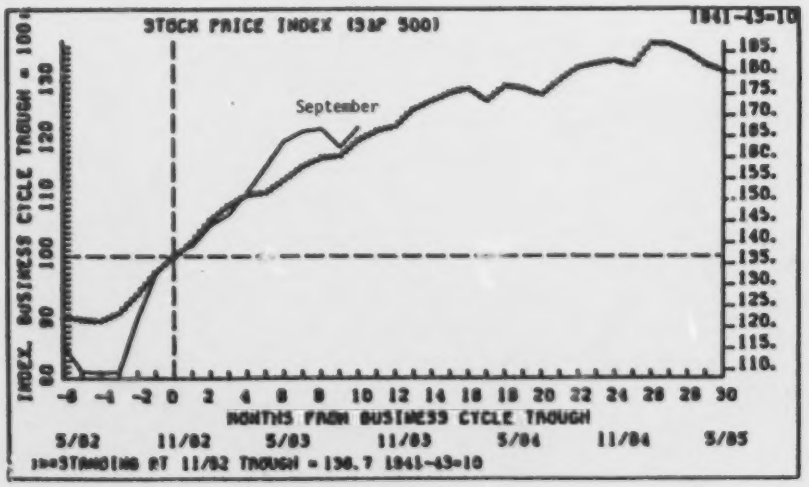

CORPORATE BOND YIELD
PERCENT
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 12.2 PERCENT

CHART 52


STOCK PRICE INDEX (S&P 500)
1941-43=10
INDEX, BUSINESS CYCLE TROUGH = 100
September
MONTHS FROM BUSINESS CYCLE TROUGH
5/82 11/82 5/83 11/83 5/84 11/84 5/85
STANDING AT 11/82 TROUGH = 136.7 1941-43=10

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The Columbia Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on domestic U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the six other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
808 Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

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This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the later stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisions contained in this report help one anticipate what is typical and distinguish it from the unusual.

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